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Screening Study on Feasibility of Standards of Performance for Secondary Aluminum Manufacturing, Appendices

TRC Environmental Consultants, Inc.
Wethersfield, CT

Prepared for

Environmental Protection Agency
Research Triangle Park, NC

Sep 78

U.S. Department of Commerce
National Technical Information Service

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16. ABSTRACT

This report contains background information on the secondary aluminum manufacturing industry. The geographical distribution, production, processes, emission sources and rates, state and local air pollution regulations, control techniques and sampling procedures are discussed. This background information has been used in an emission projection model (Model IV) to determine the emission reductions that could be achieved by the application of new source performance standards (NSPS) that require the installation of best available control technology for the period 1977 to 1987.

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APPENDICES

TO

SCREENING STUDY ON FEASIBILITY OF

STANDARDS OF PERFORMANCE FOR SECONDARY

ALUMINUM MANUFACTURING

TRC

THE RESEARCH CORPORATION
OF NEW ENGLAND

ENVIRONMENTAL CONSULTANTS

Final Report by

Edward T. Brookman

Contract No. 68-02-2615
Task Order No. 7

EPA Task Manager
Mr. William O. Herring
Office of Air Quality Planning and Standards
Emission Standards and Engineering Division

U. S. ENVIRONMENTAL PROTECTION AGENCY
Research Triangle Park, North Carolina 27711

September 1978

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APPENDIX A

RESULTS OF VISITS TO AND CONTACT WITH PLANTS, REGULATORY AGENCIES AND CONSULTANTS.

This appendix contains the following information in order as follows:

- Trip reports from the two plants visited
- Trip reports from the two regulatory agencies visited
- Correspondence and information received by mail from other industries and agencies
- Reports on meetings with outside consultant
- Results of a search through the Compliance Data System (CDS) file for information on secondary aluminum smelters (SIC 3341)
- Location of additional information not obtained during this study.

Trip Reports

The following section contains the trip reports from the visits to the two secondary aluminum plants (Vulcan and Allied). These reports were written by William Herring of EPA who accompanied TRC on the plant visits. Also included is data taken from a report on an emission test at Vulcan.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: JUL 28 1978

SUBJECT: Trip Report - Visit to Vulcan Materials Company

FROM: William O. Herring
Stationary Source Analysis Section

TO: George B. Crane, Chief
Stationary Source Analysis Section

I. Purpose

To obtain information on secondary aluminum processes, emissions, and emission control systems for a screening study on feasibility of standards of performance for that industry.

II. Place and Date

Vulcan Materials Company, Sandusky, Ohio, June 27, 1978.

III. Attendees

A. Mr. Jack Eagan, Manager of Environmental Control, Metals Division, Vulcan Materials Company

B. Mr. John Hrovatich, Plant Manager, Vulcan Materials Company

C. Mr. Edward Brookman, TRC

E. Mr. William Herring, EPA

IV. Discussion

At this plant, scrap aluminum is consumed to produce specification aluminum alloys, virtually all containing 85 to 95% elemental aluminum. The alloys are produced as ingots or as molten aluminum, delivered to customers in containers called "ladles."

Scrap such as sidings, turnings, cans, old sheet and castings with removable iron attachments are first fragmentized to fist size or less in a hammermill. Iron is then magnetically removed. Dust, consisting of paint and plastic chips and dirt, is generated. Particle size is thought to be greater than 100 microns. The dust is collected in a baghouse. The company representatives commented that is is easily removed by means of the baghouse; that it can be moved with shovels, and is disposed of as landfill. About 30% of production at this plant is

EPA FORM 1320-6 (REV. 3-76)

derived from fragmentized scrap. No emission tests have been conducted for the fragmentizing operation.

Oil coated scrap, such as borings, and painted or plastic coated items such as sidings are treated after fragmentizing in a rotary-drum "chip dryer." Pyrolysis effected by natural gas (or alternatively oil) combustion removes the coatings at 500 to 1000°F. Emissions include solid carbon particles and compounds of carbon and hydrogen. They are controlled by a natural gas (or alternatively oil) fired afterburner. We observed the dryer and afterburner during operation. Some steam and a small amount of smoke appeared to escape, within the plant building, from the dryer. A vibrating device after the dryer removed some impurities that might include dirt and coating pigments such as titanium dioxide (TiO_2). These go to the same baghouse that control the fragmentizing operation. I noted zero opacity of emissions from the afterburner stack. Dryer-treated scrap accounts for about 40% of production at this plant. Emission tests at a similar Vulcan plant in California show the afterburner gas flow rate of 3,640 scfm dry. The emission data were transcribed by Mr. Brookman and will be made available to the EPA file on this study.

Scrap with iron inserts or attachments, not easily removed, and sometimes associated with organic materials, such as pistons and lawn chairs, are sweat processed in a reverberatory furnace burning natural gas (or alternatively oil). Furnace temperature is around 2000°F. The aluminum melts and flows from the furnace while the iron remains in the furnace for removal after the aluminum extraction. At this plant, scrap fed to the sweat furnace contains less organic matter than that fed to the dryer. Consequently, carbonaceous emissions are less. An afterburner is, however, built into the furnace to control any carbonaceous emissions. We observed the sweat processing operation. The furnace was not being charged, but aluminum was being melted and flowed from its hearths. Only a trace of smoke (5% opacity or less) was visually indicated at the afterburner stack. About 10% of production at this plant is accounted for by aluminum from this sweat furnace. No emission tests have been conducted at this furnace.

This plant processes, basically, only its own residual scrap. Skimmings, with residual flux, and dross are removed together from the process baths and washed with water in a rotary-drum ball mill to concentrate the metallic aluminum to 60% (dry basis). The only possible air pollutant emissions would be from drying the concentrate. These are not considered significant. Residual scrap accounts for less than 5% of plant production.

There is no dry mechanical separation of metal from skimmings at this plant. Sweat processing of residual scrap is not practiced at this or other other modern plants. The company representatives commented that sweat processing residual scrap would be wasteful.

There is no recovery of waste heat from afterburners at this plant. Mr. Eagan commented, however, that such a heat recovery system has been installed at one Vulcan plant and that Alcoa has one that is used in can processing. The recovered heat is used in the dryers. These systems are, however, very costly.

Melting and alloying (M&A), including demagging, at this plant is done in reverberatory furnaces. Each furnace consists of one combustion chamber and one charging well. Fuel is natural gas or oil. A batch (or "heat") of metal is commonly processed in periods up to 24 hours. Charging takes up to 2/3 of this time. Chlorination, if required, takes 3 to 4 hours.

At one of the M & A furnaces, gases from the well and the combustion chamber go to the same hood which is vented to the atmosphere. We observed operation of this furnace being charged with scrap radiators. Flaming occurred as they were charged, and there was some smoke at the well, apparently caused by some organic material or coatings associated with the scrap. This smoke was burned further by mixing with air and the hot combustion chamber exhaust gas.

I noted operations at two other melting and alloying furnaces. At these, the wells and combustion chambers were vented separately.

Dryer-treated scrap was charged to one furnace resulting in little visible smoke or steam at the well.

At the other furnace, the bath was being demagged by "bell system" chlorination. Chlorine (Cl_2) was bubbled into the bath in the charging well. The resulting emissions, probably consisting mostly of aluminum chloride vapor (Al_2Cl_6) with small amounts of unreacted Cl_2, enter the bell system and are removed by scrubbing. There appeared to be no gas stream discharged from this system. A hose removed the spent scrubbing fluid. There were no chlorinating emissions that I could detect either visually or by odor in the region of the furnace. Mr. Eagan indicated that the bell system removes chlorinating emissions nearly 100% since there is very little leakage around the bell system.

Mr. Eagan described the bell system scrubbing operation as follows. Raw river water is used as the scrubbing fluid. Hydrochloric acid (HCl), formed by hydrolysis of dissolved aluminum chloride ($AlCl_3$), is neutralized by an alkali in the scrubbing liquid. Heavy particles are allowed to settle out. Aluminum hydroxide, the other $AlCl_3$ hydrolysis product, cannot be settled out. After settling of the heavy particles, the fluid goes to the municipal treating system. It is accepted by the local authority and has been considered beneficial because the $Al(OH)_3$ substitutes for alum required for treating the total sewage stream.

Fluxing salts used to remove metal oxides and otherwise cleanse the metal were not being applied during our plant observations. We were told, however, that a mixture of about one-half NaCl and one-half KCl with 2 to 5% fluorspar is used which does not fume except for steam if the flux is moist.

Inspection of the M&A furnace stacks after the aforementioned in-plant observations indicated only traces of emissions (5% opacity or less).

Pertaining further to emissions, the stacks at this plant were low and could not be observed from the ground except from certain locations. During the several instances when we were outside of the plant buildings, but not within view of the stacks, only once could a distinct trace of visible smoke be seen, apparently caused by charging some scrap with a small content of organic matter to a M&A furnace. During all other observations, there were no visible plumes.

Emission tests at a M&A furnace had been conducted by a contractor. Test results were transcribed by Mr. Brookman and will be made available to the file on this study.

Pertaining to the total secondary aluminum industry, Mr. Eagan commented that yearly production is about 1600 million pounds, and that its products are sold in competititon with the primary producers, usually at prices a cent or two less per pound. There may be some increase in secondary aluminum processing because of more aluminum being used in automobiles. This automotive scrap will, however, have more than the usual organic content, entailing higher cost to burn it off. There are also increasing amounts of scrap containing the higher percentages of magnesium, such as beverage cans, which increases the demagging that must be done.

Pertaining to information claimed proprietary and obtained at this visit, Mr. Eagan asked that no production rate or process weight rate be released. Accordingly, all plant production and process weight rate data have been transcribed as an entry in the ESED Confidential File, then cut out of my plant notes.

V. Conclusions and Recommendations

A. If uncontrolled, air pollutant emissions at this plant would consist of:

1. Carbonaceous emissions derived from organic constituents in scrap such as oils, grease, paint, and plastics.

2. Chlorine-demagging emissions comprised of hydrolysis products of $AlCl_3$ including HCl and $Al(OH)_3$.

B. Carbonaceous emissions are effectively controlled at this plant by one or a combination of the following techniques:

1. Pyrolysis of organic constituents in a dryer with afterburner.

2. Pyrolysis of organics in a sweat furnace with afterburner.

3. Providing a good air draft at the M&A furnace charging well, to accomplish nearly complete combustion when scrap with minor organic content is charged, then burning off any remaining carbonaceous smoke by allowing it to mix with air then enter the hot combustion chamber exhaust gas stream.

C. Chlorine-demagging emissions at this plant are effectively controlled by scrubbing, using the bell system, with an alkaline solution to remove aluminum chloride and neutralize its acidic hydrolysis product.

D. The techniques just listed for controlling carbonaceous emissions (essentially by afterburning scrap-derived pyrolysis products) and chlorine-demagging emissions (by bell-system scrubbing) are "candidate best systems of emission control."

E. the energy and cost impact of afterburners for controlling carbonaceous emissions might be critical to their evaluation as a control alternative in Standards Support and Environmental Impact Statement (SSEIS) development, because of natural gas and oil prices and supply limitations. Applicability of waste heat recovery as practiced, to a limited extent, by Vulcan and Alcoa, would therefore be of special interest if SSEIS development is initiated. Inquiries and a plant visit to Alcoa to ascertain their experience regarding heat recovery and the effectiveness of their systems are suggested for SSEIS development.

F. Water pollution impact of the bell system and other scrubbing systems for controlling chlorine-demagging emissions, under new Federal water pollution legislation, might be critical to its evaluation as a control alternative in SSEIS development. This will require further study in SSEIS development.

Note: A copy of the first draft of this report, dated July 5, 1978, was sent to Mr. Eagan. Comments of Mr. Eagan in phone discussions with Mr. Herring were considered in rewriting this report.

VULCAN TEST DATA

Emission Test on Reverbatory Furnace - 3/18/74

Conducted by Crobaugh Labs - observed by state

Overall results:

From material balance: 28 lb/hr for 20 hr processing period from uncontrolled furnace air emissions

From AP-42: 65.4 lb/hr uncontrolled emissions

According to Ohio EPA regulation EPA-11-11, the uncontrolled particulates must be reduced to 5.27 lb/hr for the 28 lb/hr estimate and to 10.6 lb/hr for the 65.4 lb/hr estimate

Test results: 2.25 lb/hr - well within limits

	Material Charged	Weight
Test I		
10:12-11:05	Misc. clip and sow chunks (fluxed, but not skimmed)	clip - 7,000 lb sow - 7,035 lb
		14,035 lb
Test II		
2:28-3:40	Painted siding	750 lb
	Misc. clip	3,500 lb
	Borings (fluxed & skimmed)	5,500 lb
		9,750 lb
Test III		
4:00-5:21	Borings	8,150 lb
	Silicon	400 lb
	50-50 Cu (fluxed & skimmed)	200 lb
		8,750 lb
Test IV		
7:15	$AlCl_3$ - Bell scrubber in service Cl_2 - input rate of 600 lb/hr	
Test V		
4:30	Combustion Chamber	

Emission rates as follows:

Test I	- Open hearth, charging	1.65 lb/hr
Test II	- Open hearth, charging	2.01 lb/hr
Test III	- Open hearth, charging	4.33 lb/hr
Test IV	- Open hearth, demagging	1.08 lb/hr
Test V	- Combustion chamber	1.08 lb/hr

Results:

Emissions from runs I, II, III = 3.14 + 3.82 + 8.23 = 15.19 lb

Weight of material charged = 32,535 lb or 65.1% of typical 50,000 lb charge

So, typical emissions during 16 hr charge period =

$$\frac{15.19 \text{ lb}}{0.651} = 23.33 \text{ lb per charge} = 1.45 \text{ lb/hr}$$

Emissions from run IV = 1.08 lb/hr x 16 hr - 17.28 lb

Total emissions = 23.33 + 4.32 + 17.28 = 44.93 lb

The rate is thus 44.93/20 hr = 2.25 lb/hr

Note - the charging rates for tests I, II & III were nearly twice those usually used during daily operations. This was to depict peak emission periods.

Method 5 was used. Further test conditions and data are available.

Materials Balance Calculations of Uncontrolled Part. Emissions

Source	Uncontrolled Part. Output (lb/heat)	Uncontrolled Part. Emission Rate (lb/hr) - 20 hrs.
Total part. from furnace discharge flues	44.9	
Total $AlCl_3$ released from process during demagging collected & measured in "Bell" system	515.0	
Total	559.9	28.0

Calculation of Uncontrolled Part. Emissions using AP-42

Source	Uncontrolled Part. Output (lb/heat)	Uncontrolled Part. Emission Rate (lb/hr) - 20 hrs.
Reverb. furnace (4.3 lb/ton x 25 tons/heat)	107.5	
Chlorination (1000 lb/ton Cl_2 x 1.2 tons Cl_2/heat)	1200.0	
Total	1307.5	65.4

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: July 20, 1978

SUBJECT: Trip Report - Visit at Allied Metals Company

FROM: W. O. Herring W. O. Herring
Stationary Source Analysis Section

TO: G. B. Crane, Chief
Stationary Source Analysis Section

I. Purpose

To obtain information on secondary aluminum processes, emissions, and emission control systems for a screening study on feasibility of standards of performance.

II. Place and Date

Allied Metals Company, Chicago, Illinois, June 28, 1978

III. Attendees

A. Mr. Marvin Fink, Vice-President, Allied Metals Co.
B. Mr. Edward Brookman, The Research Corporation of New England (TRC)
C. Mr. John Notar, EPA Region V
D. Mr. William Herring, EPA

IV. Discussion

At this plant, scrap aluminum is consumed to produce specification aluminum alloy ingots, typically containing 85% aluminum.

This plant does not have a crusher for fragmentizing scrap. Raw scrap is initially processed by sorting, using a conveyor and a magnet for removing iron.

Scrap, such as borings, turnings, and spatters, is treated in a natural-gas-fired, rotary-drum dryer to remove organic contaminants. Iron inclusions are then magnetically removed. The dryer exhaust gas goes to an afterburner. The plant building has very high ceilings (70 feet), and the dryer-afterburner stack exhausts within the building. During our plant observations, this system being in use, I could not see any emissions from that stack or detect any odor indicating such emissions. The building was too dark, however, for an opacity reading. About 10% of scrap at this plant is dryer-treated. Emission tests on the dryer-afterburner system have not been conducted.

Scrap with iron attachments, which might also be associated with grease and other carbon compounds, such as aluminum castings containing steel parts, is sweat processed in a natural gas or oil fired open-hearth furnace. This furnace was not in use during our visit. About 20% of scrap at this plant is sweat processed.

Residual scrap is not processed at this plant. Skimmings and dross produced there are sold.

Melting and alloying (M & A), including demagging, is done in natural gas or oil fired reverberatory furnaces, each consisting of one hooded charging well and one combustion chamber with a separate flue. About 70% of the scrap processed at this plant goes to the M & A furnace without drying or sweating pretreatment. This untreated scrap includes organic coated items such as beer cans, sidings, and printing sheets. A production batch, or "heat", is processed in 24 hours.

We observed a pile of cans being charged to one furnace. Some visible smoke filtered through the pile, in the charging well, and entered the hood. A luminous flame, however, indicated considerable combustion of the pyrolysis products.

Fluxing salts for cleansing and covering the bath at the well were not being charged during our inspection. Mr. Fink said that a cryolite-KCl-NaCl mixture is used, and that not much of this is emitted.

Demagging was not done during our inspection. Mr. Fink said that aluminum fluoride (AlF_3) is used at the well for demagging, and that visible fumes result. About 3 1/2 pounds of AlF_3 are used per pound of magnesium removed. It is applied for about 1 1/2 hours during each 24-hour heat. All aluminum processed at this plant is demagged.

Emissions from the sweat furnace, and the M & A furnace charging well and combustion chamber go through separate ducts to a manifold, then to a Teller, internally coated baghouse.

To demonstrate the effectiveness of the baghouse, a large quantity of oily turnings were charged to one furnace. This caused a large amount of smoke at the well, entering the hood , but no visible emissions at the baghouse stack.

In the baghouse system, the emissions are first cooled in a quench tank. The cooling water entering the gas stream is entirely evaporated, prior to baghouse entry.

The baghouse coating material is applied once a week. The spent coating is disposed of commercially. Mr. Fink did not know of its ultimate disposal method.

The city of Chicago tested this plant during September, 1977, using EPA Method 5. Mr. Fink loaned us his copy of the Chicago report. Copies were made at the EPA Region V office and sent to the EPA and TRC participants in this visit.

The Chicago test report showed the following data on the baghouse:

A. 4 modules
B. 4,914 square feet cloth area per module.
C. 260 bags per module.
D. Bags coated with "Tesisorb."
E. Shaker type cleaning system.
F. 21" designed pressure drop.

The test data showed operation of the baghouse at gas flow rates and outlet temperature approximating 41,000 SCFM and 110°F, respectively.

During the tests, the two M & A furnaces at the plant, but not the sweat furnace, were in use. Mr. Fink mentioned that the baghouse system was planned to include one more M & A furnace and one more sweat furnace, in the event of a plant expansion, without changing the baghouse flow rate.

The city of Chicago test data were obtained during charging of scrap and demagging and included particulate, hydrocarbons (total, condensible, and gaseous), carbon monoxide, and fluorides.

Test ports are located in the middle of a verticle section of baghouse exhaust duct with about 5 feet of straight duct above and below.

Mr. Fink said that the baghouse capital cost was about 1/2 million dollars.

Pertaining to the secondary aluminum industry, Mr. Fink commented that growth and plant expansion are not expected because of increasing consumption of scrap by the primary producers, owing to the energy advantage of processing scrap as compared to ore, and more competition from the primaries. Production of the secondary aluminum industry is currently at 60% of capacity.

Mr. Fink asked that no production data be released. Accordingly, all data that he furnished on production rates and from which production rates could be calculated has been entered into the ESED confidential file.

V. Conclusions and Recommendations

A. The significant, actual or controlled, air pollutant emissions at this plant are:

1. Carbonaceous emission derived from organic constituents in scrap such as oils, grease, paint, and plastics.

2. Particulate matter containing fluorides and probably chlorides and oxides formed during demagging with AlF_3.

B. Carbonaceous emissions are effectively controlled at this plant by the following techniques:

1. Organic contaminants on small scrap fragments such as borings are removed in a dryer with afterburner.

2. Organic contaminants associated with scrap other than small fragments are burned off in sweating or in charging to a M & A furnace. Oxidation to CO_2 at these furnaces removes part of the resulting pyrolisis products. The remaining particulate is removed in a coated baghouse sufficiently to obtain zero opacity.

C. Fluoride-demagging emissions at this plant are effectively controlled by removal in a coated baghouse system.

D. The techniques just listed for controlling carbonaceous emissions (burning scrap-derived pyrolysis products and collecting the remaining particulate in a coated baghouse) and fluoride-demagging emissions (by coated baghouse) are "candidate best systems of emission control."

E. Solid waste impact might impose the most significant limitation on use of the coated baghouse for removal of both carbonaceous and fluoride emissions. If standards Support and Environmental Impact Statement (SSEIS) development is undertaken, spent coating samples should be tested to determine whether significant leaching of toxic matter would be likely if the spent coating is landfilled.

F. The sources of most emissions at this plant, if uncontrolled, would be the M & A furnaces because (1) all scrap aluminum processed goes through M & A furnaces, (2) a large amount of the scrap charged to M & A furnaces (up to 70%) has some degree of organic coating, and (3) fluoridation is done at the M & A furnaces. The borings dryer and sweat furnace, if uncontrolled, would be sources of smaller amounts of emissions because (1) they account for only 10% and 20%, respectively, of the scrap processed, and (2) emissions would be generally limited to the carbonaceous pyrolysis products, which would be partially oxidized by air in the dryer and sweat furnace.

G. The City of Chicago test report provides data on emissions during the most usual operating conditions at this plant; that is, with two M & A furnaces in use. Emissions to the baghouse would be increased to only a small extent if the sweat furnace were also in use. There would also be times when the emissions would be less because of one furnace being inoperative for maintenance. Thus the City of Chicago data appears representative of effective and economically acceptable emission control at this plant during normal production conditions. Those data should therefore be useful to the data base for SSEIS development.

H. The pollutants reported in the City of Chicago Report and listed below should be included in tests at similar plants for SSEIS

development.

1. Particulate (EPA Method 5)
2. Total Hydrocarbons
   a. Condensible
   b. Gaseous
3. Carbon monoxide
4. Fluorides

Note: A copy of the first draft of this report, dated July 14, 1978, was sent to Mr. Fink. Comments by Mr. Fink in phone discussion on July 17 and 18 with Mr. Herring were considered in rewriting this report.

Regulatory Agency Trip Reports

The following section contains the trip reports from the visits made to two regulatory agencies (Region IX, EPA and Indiana State Board of Health). The data is given in English units since these were the units obtained from their files.

Trip Report

Place: Region IX EPA
Surveillance & Analysis Division
215 Fremont St.
San Francisco, Cal.

Contacts: Mr. Arnold Den
Ms. Linda Wunder-Freet (Chem. eng. - air investigator)

Date: June 21, 1978

I visited EPA in order to obtain information on the secondary aluminum plants located in Region IX. According to the literature, there are eleven plants in Region IX - all in California. These are listed in Table I. I examined EPA's Compliance Data System (CDS) file, emission inventory report, and inspection files in an effort to obtain information on these plants. Unfortunately, information was only available on some of the larger plants. According to Ms. Wunder-Freet, this was probably due to the size of some of the operations. If the sources are estimated to emit less than 25 tons/year (T/Y), then they would not be included in CDS or the Emission Inventory (EI). And if no complaints or problems were encountered, then they would not be in the files. Table I also lists the sources of information that were available for each plant. The remainder of this report summarizes the information obtained.

One additional plant was added to the list. This plant, the Liston Brick Co., was not included in our literature, but is a secondary aluminum plant. This plant is also listed in Table I.

Further information regarding the plants in the Los Angeles area will hopefully be forthcoming since a questionnaire was forwarded to the Air Pollution Control District of that region (South Coast Air Quality Management District.

Table I

Region IX Secondary Aluminum Plants

Plant Name	City	County (code)	EI	CDS	File
Aetna Metals Co.	Industry	Los Angeles (4200)	X		
Vulcan Materials Co.	Corona	Riverside (6420)	X	X	X
Chersky (Jon) & Sons	E. Los Angeles	Los Angeles (4200)			
Vista Metals Corp.	Fontena	San Bernardino (6700)	X		
General Metals Ref. Co.	Gardena	Los Angeles (4200)			
Goldberg Metal Ref. Corp.	Gardena	Los Angeles (4200)			
Progressive Metals Co.	Gardena	Los Angeles (4200)			
Kirk (Morris P.) & Son	Los Angeles	Los Angeles (4200)			
McGowan Co., Inc.	Los Angeles	Los Angeles (4200)			
Globe Metals Co.	Oakland	Alameda (0060)		X	
U.S. Reduction Co.	Ontario	San Bernardino (6700)	X		X
Liston Brick Co.	Corona	Riverside (6420)			X

CDS Information

1) Globe Metals:

Source no. - 00042
SIC - 3361
Compliance Status (CMST): 3
Emission Category (ECAT): 2
Inspected - 6/16/77

2) Vulcan Materials Co.

Source no. - 00014
SIC - 3341
CMST: 2
ECAT: 2
Inspected:

Action No.	6 - VE Evaluation	2/18/75
	7 - VE Evaluation	5/29/75
	8 - VE Evaluation	9/25/75
	9 - VE Evaluation	12/23/75
	10 - VE Evaluation	3/25/76
	11 - VE Evaluation	6/24/76
	12 - Source Test	8/26/76
	13 - Source Test	12/2/76
	14 - Source Test	1/26/77
	15 - VE Evaluation	6/29/77
	16 - VE Evaluation	9/30/77
	17 - VE Evaluation	11/30/77

Where VE = Visible Emissions

Emission Inventory Information

1) Vulcan Materials Parkridge & Sampson Sts.
SIC 3361

Point	SCC	Description	Process Weight	Pollutants(t/y) NO_2
01	3-04-001-03	Alum. reverb. furnace	0002125	
	3-90-006-05	Metal melting - nat. gas	0000016	
	3-90-005-05	Metal melting - dist. oil	0000000	
02	3-04-001-03	Alum. reverb. furnace	0002800	
	3-90-006-05	Metal melting - nat. gas	0000021	
	3-90-005-05	Metal melting - dist. oil	0000000	
08	3-04-001-99	Alum. scrap - drum dryer	0002029	1
	3-90-006-99	Alum. scrap - drum dryer	0000016	

2) Aetna Metals Co. 13329 E. Ector St.
SIC 3341

Point	SCC	Description	Process Weight	Pollutants (t/y) Particulate	NO_2
01	3-04-001-03	Alum. reverb. furnace	0006240	4	1
02	3-04-001-03	Alum. reverb. furnace	0003744	2	1
03	3-04-001-03	Alum. reverb. furnace	0004680	8	2
04	3-04-008-04	Sec. zinc	0000650		
05	3-04-008-08	Sec. zinc	0002903	1	2
06	3-04-008-99	Zinc alloying furnace	0002903		2
07	3-04-008-03	Sec. zinc	0002903		
08	3-04-008-02	Sec. zinc	0002903	1	9

3) Vista Metals 13425 Wittram
SIC 3341

Point	SCC	Description	Process Weight	Pollutants (t/y) Particulate	NO_2
01	3-04-001-03	Alum. reverb. furnace	0005000	3	
	3-90-006-05	Metal melting - nat. gas	0000003		
	3-90-005-05	Metal melting - dist. oil	0000000		
	3-04-001-04	Alum. chlorination station	0005000		
02	3-04-001-03	Alum. reverb. furnace	0008000	5	2
	3-90-006-05	Metal melting - nat. gas	0000010		
	3-90-005-05	Metal melting - dist. oil	0000013		
03	3-04-001-01	Sweating furnace	0001200	2	
	3-90-006-05	Metal melting - nat. gas	0000002		
	3-90-005-05	Metal melting - dist. oil	0000000		
04	3-04-001-03	Alum. reverb. furnace	0008000	5	2
	3-90-006-05	Metal melting - nat. gas	0000010		
	3-90-005-05	Metal melting - dist. oil	0000013		

4) U.S. Reduction Co. Box 507
SIC 3341

Point	SCC	Description	Process Weight	Pollutants (t/y) Part.	SO_2	NO_2	HC
01	3-04-001-03	Alum. reverb. furnace	0010000	2	2	14	3
	3-90-006-05	Metal melting - nat. gas	0000113				
	3-90-005-05	Metal melting - dist. oil	0000070				
02	3-04-001-99	Alum. borings dryer	0010000	9		2	
	3-90-006-99	Borings dryer - nat. gas	0000011				
	3-90-005-99	Borings dryer - dist. oil	0000013				
03	3-04-001-03	Alum. reverb. furnace	0010000	2	20	18	
	3-90-006-05	Metal melting - nat. gas	0000147				
	3-90-005-05	Metal melting - dist. oil	0000072				
04	3-04-001-99	Rotary borings dryer	0003500	3		4	
	3-90-006-99	Borings dryer - nat. gas	0000032				
07	4-03-001-07	Fixed roof tank - breathing - dist. fuel	0000060				
	4-03-001-52	Fixed roof tank - working - dist. fuel	0000060				

Site Information

I. Vulcan Materials Co.

Chlorine demagging:

Performance day

A. Avg. chlorine input	1,015 lbs. Cl_2
B. Chlorine consumption	
1. into $MgCl_2$	935 lbs. Cl_2
2. into $AlCl_3$	80 lbs. Cl_2
C. Air pollution from Cl_2	
1. $MgCl_2$	solid - none to atmosphere
2. $AlCl_3$ (reported as Cl_2)	
(a) Captured in scrubbers	79.8 lbs. Cl_2
(b) Bypass scrubbers to atm. (measured)*	0.2 lbs. Cl_2
*(1) a typical high particulate concentration in furnace hood gas during demagging	0.004 gr/scf
Equivalent $AlCl_3$ rate	0.26 lbs/day
Equivalent Cl_2 rate	0.17 lbs/day
(2) opacity in atmosphere	none

EI data:

1) Alum. reverb. furnace (#2503)

gas usage - 16.5 mm cft^3

oil usage - 0

afterburner gas usage (to both 2503 & 2334) - 19.5 mm cft^3

CO: 19.8 lbs/hr x 24 h/d x 5 d/w x 17 w/y = 20.196 T/Y

NO_x: 1.71 lbs/hr x 24 h/d x 5 d/w x 17 w/y = 1.75 T/Y

Part: 4.45 lbs/hr x 24 h/d x 5 d/w x 17 w/y = 4.5 T/Y

2) Alum. reverb. furnace (#2334)

gas usage - 21.1 mm cft^3

oil usage - 0

CO: 19.8 lbs/hr x 24 h/d x 5 d/w x 23 w/y = 27 T/Y

NO_x: 1.71 lbs/hr x 24 h/d x 5 d/w x 23 w/y = 2 T/Y

Part: 4.45 lbs/hr x 24 h/d x 5 d/w x 23 w/y = 6 T/Y

3) Chip dryer (#2400)

gas usage (dryer) - 15.8 mm cft^3

gas usage (afterburner) - 31.5 mm cft^3

CO: 23 lbs/hr x 20 h/d x 5 d/w x 40 w/y = 4.6 T/Y*

Part: 6.53 lbs/hr x 20 h/d x 5 d/w x 40 w/y = 13 T/Y

NO_x: estimate based on 213.33 lb/mm cft^3

47.3 mm cft^3 (gas burned in dryer & afterburner) x 213.33 lb/mm cft^3 = 5.0 T/Y

Sampling Test - reverb. furnace:

Plant has 4 reverb. furnaces whose charging wells are vented to one afterburner to control smoke emissions. Compliance test on afterburner on 8/26/76. Only one furnace running at the time:

flowrate: 12,041 scfm
process wt.: 5,134 lbs/hr
avg. exhaust temp.: 1230° F.
max. capacity of furnace: 110,000 lbs. with a 24 hr. cycle between tapping
normal pour is 40,000 lbs/day

During the test, 3285 lbs. of fairly clean sheet alum. clippings were charged along with 1849 lbs. of dried "borings". Testing was conducted about 2 hrs. after a pour.

*Note: calc. in error - this was as copied from file.

Sampling procedure: a velocity traverse of 12 points was taken using an "S" type pitot tube, magnehelic gauge and digital thermometer at a point 5' before the stack discharge. The sampling was conducted one hour at one reference point using a quartz probe and wet impingement train. CO was measured with an Infrared Industries NDIR instrument. NO_x and SO_2 were measured on an Environmetrics instrument.

Results:

Emissions	Allowed
Part. - .0431 gr/scf	0.0738 gr/scf (rule 404)*
4.45 lb/hr	6.11 lb/hr (rule 405)
CO - 380 ppm	2,000 ppm (rule 407)
NO_x - 20 ppm	no limits
SO_2 - nil	.05% (rule 53)

Sampling test - chip dryer afterburner - test #1:

The chip dryer is a direct fixed rotary drum unit. It has one 4×10^6 Btu/hr nat. gas burner. Alum. borings and shavings are normally fed by hand onto a feed conveyor. A 150 HP ring crusher breaks up big pieces or bundles. The afterburner is of vertical, natural draft design. It has 3 Eclipse 2412 burners rated at 2.55×10^6 Btu/hr each. The max. charge rate is from 4000 to 5000 lb/hr.

Flow rate: 3293 scfm
Process wt.: 2420 lb/hr

Sample procedure: a velocity traverse was run at the stack discharge using an "S" type pitot tube and magnehelic gauge. The sample was drawn for one hour from the center of the stack through a quartz probe into a wet impingement train. The velocity and temperature were monitored. CO measured on Infrared Industries NDIR instrument.

*an explanation of these rules follows the file information

Results:

Emissions	Allowed
Part. - 0.2313 gr/scf	0.1204 gr/scf (rule 404)
6.53 lb/hr	4.12 lb/hr (rule 405)
CO - 160 ppm	2,000 ppm (rule 407)
2.3 lb/hr	

Aluminum oxide was collected.

Sampling test - chip dryer afterburner - test #2:

The exceedence of emissions over the allowable was thought to be caused by the heavy tumbling action of the rotary dryer (chips falling out at 12:00). It appeared that the small chips were picked up in the exhaust and vented to the afterburner where they were either oxidized or melted and emitted to atmosphere. Changes were made to decrease tumbling action so chips fell out at 9:00. Source retested on 1/26/77.

Flow rate: 3640 scfm
Process wt.: 2214 lb/hr

Results:

Emissions	Allowed
Part. - .0979 gr/scf	0.116 gr/scf
3.06 lb/hr	3.93 lb/hr
CO - 400 ppm	2000 ppm
6.4 lb/hr	
NO_x - 24 ppm, 0.6 lb/hr	---

Additional information:

Flux is added at the furnace charging well about 2,500 lbs. of KCl and NaCl (60% & 40%).

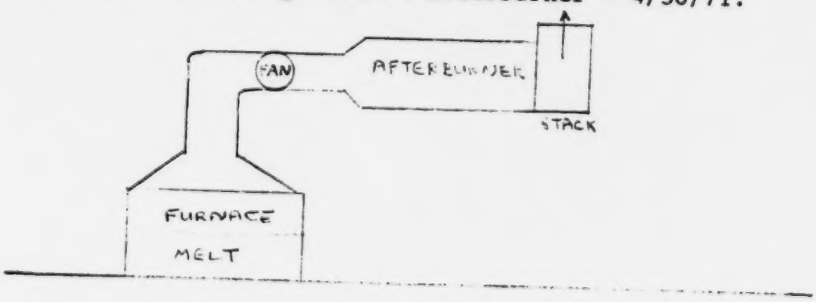
About 40,000 lbs. alum. drained from furnace/day.

An inverted bell is used to contain the chlorine fumes from the demagging process. These fumes go to a scrubber.

Crushing, screening, handling of alum. dross lots generates airborne dust. This dust is conveyed by a dust system to a REES Baghouse.

II. U.S. Reduction Co.

Source test - smelting furnace afterburner - 4/30/71:



Load of 3,000 lbs. of alum. scrap billets (composed of crushed and packaged alum. beer and pop cans) added to kiln throughout one hour sampling period.

Particulate matter test conducted using a glass packed thimble with an impinger train set-up. HC emissions sampled using a Beckman model 109A HC analyzer.

Results:

Emissions	Allowable
Part. - .0086 gr/scf	0.3 gr/scf (rule 52)
Dust & fumes - .49 lb/hr	1.77 lb/hr (rule 54)
HC - 12-24 ppm	---
NO_x - 17, 40, 65 ppm (3 samples)	---

Inspection report of 2/10/76:

Material	Process	
Alum. shavings, borings	Dryer (large)	2700 lb/hr (dry out)
Alum. shavings, borings	Dryer (small)	500-600 lb/hr (dry out)

(cont.)

Material	Process	
Alum. scrap, dryer scrap, sows	2 double well furnaces	80-85,000 lb/24 hrs. (each)
Chlorine	Chlorinating	3,500 lb/day, 55,000 lb/month
Alum. ingots	Smelting	1974 - 42 x 10^6 lbs. 1975 - 25 x 10^6 lbs. 1/76 - 1.75 x 10^6 lbs. (down 10 days) 2/76 - 2.5 x 10^6 lbs. (projected) 3/76 - 1.8 x 10^6 lbs. (projected) 4/76 - 1.8 x 10^6 lbs. (projected) 5/76 - 1.8 x 10^6 lbs. (projected)

Emissions - due to test

Process	Rule	Pollutant	Emissions	Allowable
Small rotary dryer (700 lb/hr processed)	52A	Part.	.032 gr/scf	.145 gr/scf
	54A	Part.	.648 lb/hr	1.9 lb/hr
		CO_2	3.7 % by wt.	
		NO_x	97 ppm by vol.	
		HC	5 ppm by vol.	
		CO	neg.	
Cl_2 scrubber line from settling pond	53A	Cl_2	.00036 ppm by vol.	450 ppm
Reverb. furnace #51 (north)	52	Part.	.0086 gr/scf	0.3 gr/scf
(3,000 lb/hr scrap charged)	54	Part.	.49 lb/hr	1.77 lb/hr
	66	HC(as methane)	12-24 ppm	
		CO_2	2.5% by vol.	
		NO_x	17,40,65 ppm by vol.	

Emissions - due to emission factors

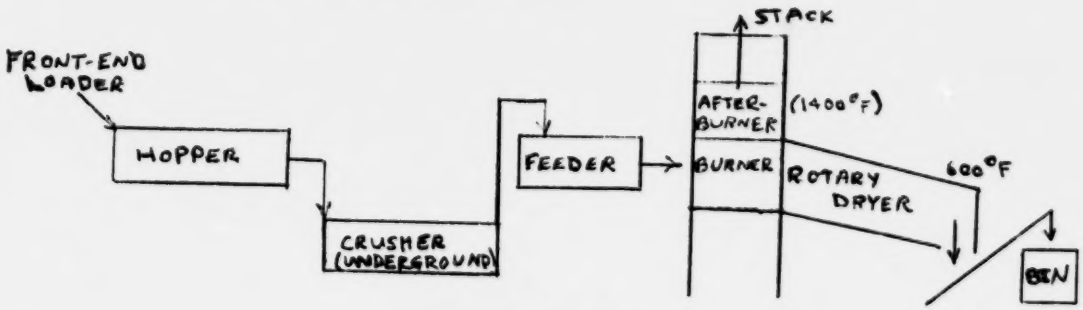
Large rotary dryer	54A	Part.	2.5 lb/hr	4.4 lb/hr
Reverb. furnace #52 (south)	54A	Part.	0.58 lb/hr	5.2 lb/hr

Process description:

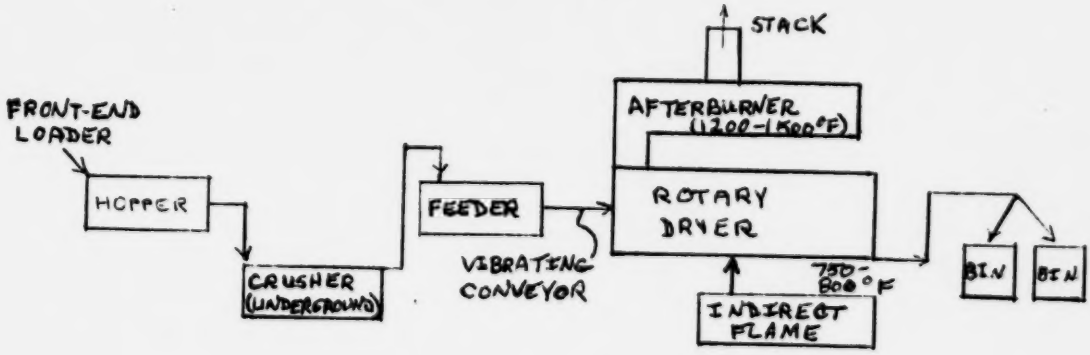
Alum. scrap such as can cuts, aircraft scraps, remelt sows, and two dryer end products are charged into the wells of furnaces. A movable door is opened during charging. The furnace is natural gas fired and melts scraps at 2300° F. A worker hand skims the dross from either well. Alloys such as silica, copper and zinc are added to the melt in proportions up to 10% by weight of the total product. During a 24 hour period: 15 hrs. to charging, 4 to refining, 4 to pouring, and 1 to cleaning and heating. Heated pipes are placed into the wells for injecting chlorine gas in order to remove Mg in the melt. A "bell" over the pipes contains emissions and forces air to a waste water pond via 30-40 water sprays (scrubber). Gases pass through a pond before entering the atmosphere. Molten alum. flows into an ingot mold machine. Water is sprayed on for cooling. Ingots are used in foundries, die casters, magwheel production and other related industries.

Diagrams:

1) Shavings/borings dryers



SMALL DRYER

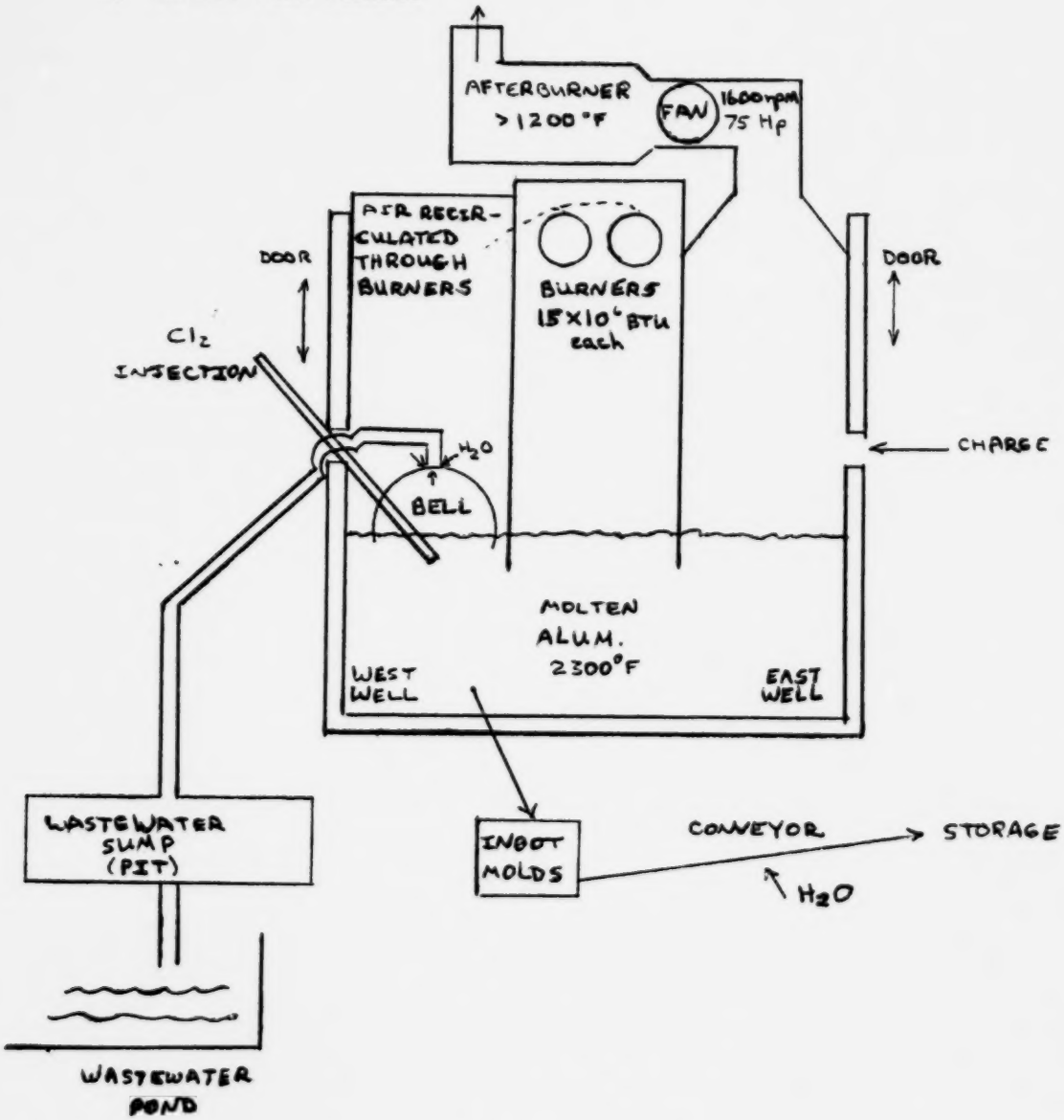


LARGE DRYER

Large dryer can efficiently burn alum. scrap containing 20% oil and moisture.

Small dryer can efficiently burn alum. scrap containing 6% oil and moisture.

2) Double well furnace



Equipment list:

Unit	Specs
1) Alum. borings dryer (large)	1) $4x10^6$ Btu/hr, nat. gas, fuel oil standby, 8000 cmm, 2700 lb/hr (dry out), 1200-1500° F
2) Alum. borings dryer (small)	2) $1x10^6$ Btu/hr, nat. gas, 500-600 lb/hr (dry out), 1400° F
3) South double well furnace (#52)	3) $24x10^6$ Btu/hr, nat. gas, diesel oil standby, 3541.7 lb/hr (max) 80-85,000 lb/24 hr
4) North double well furnace (#51)	4) $32x10^6$ Btu/hr, nat. gas, diesel oil standby, 3541.7 lb/hr (max) 80-85,000 lb/24 hr
5) Fuel oil storage tanks (diesel)	5) 2 @ 12,000 gals, 2 @ 15,000 gals, 1 @ 63,000 gals - all<.05% sulfur
6) a. Fuel oil consumption	6) a. On standby during inspection - 7,800 gals in last 24 hr Avg. 8,000 gals/24 hr for both furnaces & large dryer Fuel oil #2 used about 7-14 days/winter
b. Nat. gas consumption	b. 200-250,000 therms/24 hr

Control Equipment list:

Unit	Specs	Efficiency
1) Small dryer afterburner	$3x10^6$ Btu/hr, 2329 scfm	87.23% for part.
2) Large dryer afterburner	$8x10^6$ Btu/hr	
3) North furnace (51) afterburner	$2x10^6$ Btu/hr, 6668 scfm	92.4% for part.
4) South furnace (52) afterburner	$2x10^6$ Btu/hr	
5) Chlorination bells	30-40 water sprays in enclosed system	

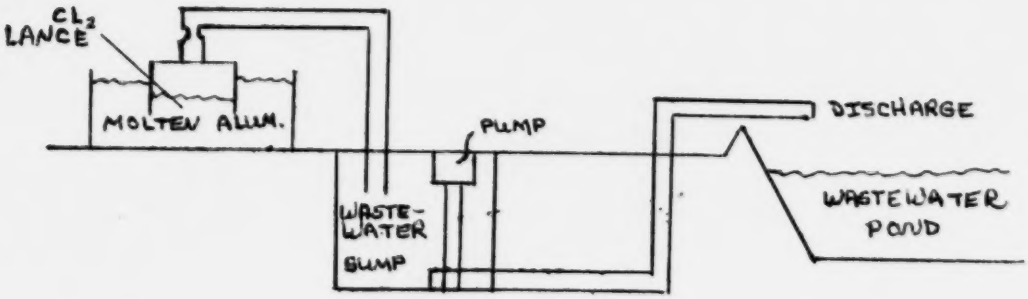
Chlorination Source Test (4/19/75):

Used 10' stainless steel probe of 3/8" tubing, polyethylene line, impingers, pump & gas meter.

Meter rate of 1 cfm.

Probe end placed 4-5" above water surface and about 10' downwind of scrubber and fall line.

Only trace amounts of Cl_2 present at outfall.



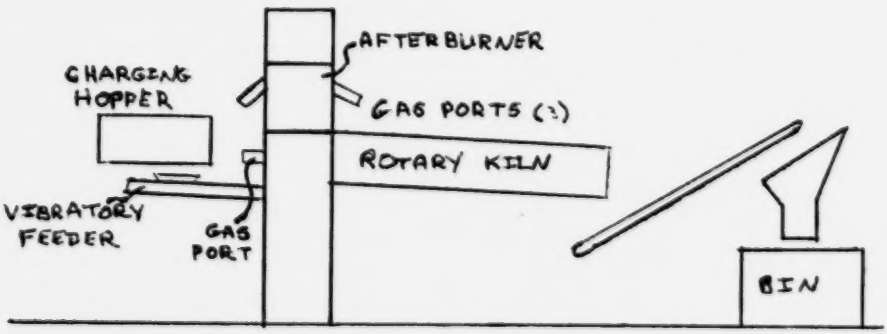
Source Test: CO, NO_x, HC from rotary borings dryer afterburner: (June 6 & 21, 1974)

Flow rate: 700 lb/hr

Instruments:

- gas absorption-type Hays Orsat Analyzer (CO_2, O_2, CO)
- flame ionization-type Beckman HC Analyzer - Model 109A and a fuel cell-type Envirometrics Analyzer with recorder (CO, NO_x)

Sample of gas also collected in an aluminum coated mylar bag (grab sample) and analyzed with Hewlett-Packard gas chromatograph.



Estimated emissions - using factors from AP-42 (7.8-1 sec. alum.)
Actual emissions - from source tests:

1) Sweating furnaces (dryers)
   a. Uncontrolled particulates
      Small dryer (700 lb/hr max.):
        14.5 lb/T x .35 T/hr = 5.075 lb/hr
      Large dryer (2700 lb/hr):
        14.5 lb/T x 1.35 T/hr = 19.575 lb/hr
      Yearly: 24 h/d x 5 d/w x 52 w/y - 6240 h/y
        Small dryer - 5.075 lb/hr x 6240 h/y = 15.834 T/Y
        Large dryer - 19.575 lb/hr x 6240 h/y = 61.074 T/Y
   b. Controlled
      Small dryer:
        Source test - .648 lb/hr
          this yields 1-.648/5.075 = 87.23% efficiency
        Allowable is 1.9 lb/hr for 700 lb/hr process wt.
      Large dryer:
        No source test - assume same efficiency
        19.575 lb/hr x .1277 - 2.50 lb/hr
        Allowable is 4.4 lb/hr for 2700 lb/hr process wt.
        Efficiency could be as low as 78% and still be
          within allowable.

2) Double well furnaces
   a. Uncontrolled
      Reverb. (3541.7 lb/hr max. or 1.77 T/hr)
        4.3 lb/T x 1.77 T/hr = 7.62 lb/hr
      Yearly: 24 h/d x 5 d/w x 52 w/y = 6240 h/y
        7.62 lb/hr x 6240 h/y = 23.77 T/Y
   b. Controlled
      Process wt. = 3,000 lb/hr or 1.5 T/hr average
      Source test - 0.49 lb/hr
      At 3,000 lb/hr → emissions = 1.5 T/h x 4.3 lb/T = 6.45 lb/hr
          (uncontrolled - above was for 3541.7 lb/hr)
      So, efficiency = 1-0.49/6.45 = 92.4%
      For max. rate: 7.62 lb/hr x .076% = 0.58 lb/hr
      Allowable is 5.2 lb/hr for 3541 lb/hr process wt.

3) Chlorination
   a. Uncontrolled
      1,000 lb of part./ton of Cl_2 gas used
      3,500 lb (1.75 T) of Cl_2 used per 24 hr
      1.75 T/D x 1,000 lb/T = 1750 lb/day (max.) = 72.92 lb/hr
      Yearly: 24 h/d x 5 d/w x 52 w/y = 6240 h/y
        6240 h/y x 72.92 = 227.5 T/Y
      Average of 55,000 lb Cl_2/month (27.5 T) or 480 h/month
        55,000 lb/m ÷ 480 h/m = 114.58 lb/hr of Cl_2
        114.58 lb/hr x 1000 lb/ton ÷ 2000 lb/ton = 57.29 lb
          of part./hr (avg.)

So, uncontrolled emissions range from 57.29 to 72.92 lb/hr

b. Controlled

Source test: .000362 ppm by vol. emissions of Cl_2

Summary of uncontrolled emissions - yearly (part.)

Small dryer	=	15.834 T/Y
Large dryer	=	61.074 T/Y
North furnace	=	23.770 T/Y
South furnace	=	23.770 T/Y
Chlorination	=	227.510 T/Y
		351.960 T/Y

III. Liston Brick Co. 20401 Temescal Canyon Rd.
Corona, Cal. 91720

Operations:

Alum. scrap melting	6000 h/y	24 h/d
Alum. scrap charging	4858 h/y	24 h/d
Scrap decontamination (chip dryer)	4500 h/y	18 h/d

Raw material:

Material	Usage rate: Avg.	Usage rate: Max.
Alum. scrap	1755 lb/hr	3800 lb/hr
Flux (Na, Cryolite)	88 lb/hr	(2000 lb/day)
Turnings, greasy scrap		3000 lb/hr

Production: 20 T/day of alum. ingots

Fuel Combustion:

Reverb. & afterburner - 96×10^6 Cfy nat. gas (1050 Btu/cf)
16×10^6 Cfh
standby: 85 gal/hr fuel oil

Chip dryer afterburner - 48×10^6 Cfy nat. gas (1050 Btu/cf)
6.7×10^3 Cfh

Emissions	Allowable	Tons/year (actual)
Part. - 0.35 lb/hr	3.4 lb/hr (Rule 405 for 1755 lb/hr)	1.1
CO - 80 ppm 4.3 lb/hr	2000 ppm	12.9
NO_x 0.4 lb/hr	---	1.2

Equipment List:

Unit	Specs
Reverb. furnace	6.4×10^6 Btu/h burners (2), capacity: 74,000 lb, nat.gas
Afterburner	Hirt model, 6000 scfm, t = 1200° F, exhaust t = 600° F, residence time = 0.3 sec., vel. = 26 fps
Chip dryer	
Afterburner	
Standby melting furnace	

Several violations have occurred over the years.

Process description:

Scrap is composed of turnings, airplane clippings, beer cans, sows (50% of scrap produced in sweating operations that melt alum. off of iron). The scrap goes to a rotary chip dryer, with an afterburner. After the dryer, the decontaminated scrap is conveyed over a magnet to remove bits of iron. It then goes to a reverb. furnace with an afterburner. The clippings are charged every 10 min., the turnings at 5 min. intervals. Flux material (NaCl, KCl, Cryolite) is used about 3 times per day. Chlorine gas is used for demagging on about 3 melts per month. Silicon, copper, and other alloying metals are added to the melt which is cast into ingot molds. The finished product contains about 85% alum., 9% silicon, and small amounts of Cu, Fe, Zn and others.

Rules

The rule numbers referred to previously deal with the allowable emissions. These rules are peculiar to each air control district. The rule numbers change over the years as the district boundaries change.

Riverside Air Pollution Control District:

Rule 52 - particulate matter concentration

Volume discharged (cu.ft./min.) calculated as DSCF	Max. concentration allowed in discharged gas gr/DSCF
<1000	0.200
1200	0.187
.	.
.	.
.	.
>250,000	0.010

Rule 50 - deals with Ringelmann chart

Rule 54 - solid particulate matter - weight - not in excess of 0.5 lb/ton of process wt. fed per hr

South Coast Air Quality Management District:

Rule 404 - particulate matter concentration

Rule 405 - solid particulate matter - weight

Rule 407 - liquid and gaseous air contaminants
CO not greater than 2000 ppm

SIC's

3361 - alum foundries (castings)
3341 - sec. nonferrous metals

Trip Report

Place: Indiana State Board of Health
Air Pollution Control Division
1330 W. Michigan St.
Indianapolis, Ind. 46206

Person Contacted: Ed Stresino
Chief, Enforcement Branch

Date: June 29, 1978

I visited the State Board of Health in order to obtain emission inventory and file information. According to the literature, there are five secondary aluminum plants in Indiana. I was able to get EI information on two of these plus one additional plant: Barmet of Indiana, Inc. which is an aluminum dross recycling plant. I was able to get file information on one of the five plus the Barmet plant. I discovered that the R. J. Fitzpatrick Co., one of the five listed, is really a zinc plant. The following table shows the information obtained:

	Company	Town	EI	File
1.	Apex International Alloys Inc.	Bicknell	No	No
2.	U. S. Reduction Co.	E. Chicago	Yes	No
3.	R. J. Fitzpatrick	Seymour	-Zinc Plant-	
4.	South Bend Smelting and Refining Co.	South Bend	No	No
5.	Wabash Alloys	Wabash	Yes	Yes
6.	Barmet of Indiana, Inc.	Rockport	Yes	Yes

Emission Inventory Information

Notes:

Control equipment codes:

1 - wet scrubber - high efficiency (95+)
2 - wet scrubber - medium efficiency (80-95)
5 - gravity collector - medium efficiency
16 - fabric filter - high temperature
18 - fabric filter - low temperature
21 - direct flame afterburner
47 - vapor recovery system

Emissions in tons/year.

Measured emissions are the potential emissions with no control.

Fuel process/operating rate is the annual amount - the units depend on the SCC no.

Maximum design rate is the maximum hourly rate - the units depend on the SCC no.

1) Barmet of Indiana, Inc.
Co. Rd. 200 N. and Co. Rd. 50 W
Rockport, Ind. 47635
Spencer County AQCR: 77 Plant ID: 0013
Contact: John Voges Phone: (812) 649-2294

UTM: X - 494.7 Y - 4196.0
SIC: 3341
SCC: 30400102 - Aluminum dross recycling
7 locations to one stack
Operates 24 h/d, 7 d/w, 52 w/y

Control equipment: primary: 2 Efficiency = 99%
secondary: 16

TSP emissions: estimate: 3 Emission Factor: 1.9
measured: 1092
allowed: 31

2) U.S. Reduction Co.
4610 Kennedy Ave.
E. Chicago, Ind. 46312
Lake County AQCR: 67 Plant ID: 0084
Phone: (219) 397-9000 UTM: Y - 461.5 Y - 4608.6

Point 01 - Space heating SCC: 10200603 SIC:3341
Operates 24 h/d, 7 d/w, 21 w/y

Pollutant	Control	Measured	Allowed	Emission Factor
TSP	-	1	1	10
CO	-	1	26	17
SO_2	-	1	1	0.6
NO_x	-	1	1	120
HC	-	1	1	3

Fuel: 3 Max.: 0.001

Point 02: Preheat Hmt Pot Exhaust SCC: 10200602 SIC: 3344
Operates 24 h/d, 7 d/w, 21 w/y

Pollutant	Control	Estimated	Measured	Allowed	Emission Factor
TSP	-	1	1	55	10
CO	-	2	2	2	17
SO_2	-	0	1	610	0.6
NO_x	-	24	24	24	230
HC	-	0	1	1	3

Fuel: 210 Max.: 028

Point 03: Chlorination Stand No. 1 SCC: 30400103 SIC: 3341
30400104
Operates 24 h/d, 6 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	21	95	16	312	187	4.3-nat. gas
CO	21	95	5	96	96	12.5-oil
SO_2	21	95	1	1	1	
NO_x	21	95	1	1	1	
HC	21	99.9	9	180	180	

Fuel: 655200 Max.: 87.5

Points 04 and 05: Chlorination Stands No. 2 and No. 5
Same conditions and results as No. 1

Point 06: Chlorination Stand No. 4 SCC: 30400103 SIC: 3341
30400104

Operates 24 h/d, 6 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	21	95	9	178	167	4.3-nat. gas 12.5-oil
CO	21	95	0	1	1	
SO_2	21	95	0	1	1	
NO_x	21	95	0	1	1	
HC	21	99.9	0	1	1	

Fuel: 374400 Max.: 50

Point 07: No. 8 Rotary Flux Furnace SCC: 30400199 SIC: 3341
Operates 24 h/d, 5 d/w, 57 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	16	99.9	9	3000	69	0.496
CO	-	-	1	1	1	.010
SO_2	-	-	1	1	1	.003
NO_x	-	-	1	1	1	-
HC	-	-	1	1	1	.002

Fuel: 78000 Max.: 12.5

Point 08: Chlorination Stand No. 9 SCC: 30400103 SCC: 3341
30400104
Operates 24 h/d, 6 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	21	95	14	269	181	4.3-nat. gas 12.5-oil
CO	21	95	3	50	50	
SO_2	21	95	1	5	5	
NO_x	21	95	0	1	1	
HC	21	99.9	2	43	1	

Fuel: 561600 Max.: 75

Point 09: Milling System SCC: 30400199 SCC: 3341
Operates 24 h/d, 5 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	18	99.9	11	11040	222	283.077

Fuel: 78000 Max.: 216.667

Point 10: Borings Dryer SCC: 30400199 SIC: 3341
Operates 24 h/d, 5 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	21	98.0	10	500	25	23.809
CO	21	98	-	-	-	.010
SO_2	21	98	-	1	1	.452
NO_x	21	98	-	-	-	.001
HC	21	98	1	20	20	9.524

Fuel: 13104 Max.: 2.1

Point 11: Salt Recovery Plant Boiler SCC: 10200502 SIC:3341
Operates 24 h/d, 5 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	-		12	13	59	15
CO	-		3	388	609	4
SO_2	-		409	24	24	142
NO_x	-		48	48	48	60
HC	-		2	3	3	3

Fuel: 1605 Max.: 0.27

Point 12: Castings Crusher SCC: 30400199 SIC: 3341 AlF_3
Operates 16 h/d, 5 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	18	99.9	1	4	16	0.769

Fuel: 10400 Max.: 2.5

3) Wabash Alloys
State Hwy. 24 West
Wabash, Indiana 46992
Contact: K. Habayeb

UTM: X - 596.1 Y - 4516.6

Point 01: 13 Aluminum Reverb. Stacks SCC: 30400103 30400104 SIC: 3341

Operates 24 h/d, 7 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	5	80	33	162	72	4.3-nat. gas
Fuel: 75000	Max.: 8.0					
TSP	1	99	26	253	49	12.5-oil
Fuel: 40425	Max.: 1.0					

Point 02: Three Chip Dryers SCC: 30400199 SIC: 3341

Operates 24 h/d, 7 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed	Emission Factor
TSP	-	-	0	180	59	
HC	47	98	0	59	9	
Fuel: 14000	Max.: 5.25					

Point 03: Dross Mill SCC: 30400199 SIC: 3341

Operates 12 h/d, 5 d/w, 52 w/y

Pollutant	Control	Efficiency	Estimated	Measured	Allowed
TSP	18	99.5	0	8228	85
Fuel: 16305	Max.: 11.9				

Permit Information

1) Wabash Alloys

1974 data:

Total production	140,600,000 lbs.
Flux received	15,000,000 lbs.
Total chlorine received	823 tons
Total caustic received	693 tons
Total dross received	87,000,000 lbs.
Total scrap received	162,000,000 lbs.
Total shredder production	8,242,079 lbs.
Total chip dryers production	32,180,000 lbs.

Shredder: capacity - 15 tons/yr
production - 6,00-10,000 lb/yr, 12 hr/day
no control

Chip dryers (3): capacity - 10,000 lb/hr (each)
production - 5,000 lb/hr (each)
control - afterburner 1300-1500° F 20 hr/day

Distribution of scrap:

20-30% direct to furnace
20-25% to dryers
10-15% to shredders
15-20% from dross
15% radiators, etc. - direct to furnace

Reverb. furnaces - avg. values:

nat. gas fuel - 16,000 cu.ft./hr.
charge 18 hr/day, 5 d/w, 50 w/y
50 tons batch (2.5 tons/hr in, 2.0 tons/hr out)
hoods recirculate gases thru burner

Demagging by chlorination:

3.5-4.0 lb chlorine/bl. Mg removed
1½ hours per batch
scrubber used - 99% eff.
approx 200 lbs. Mg removed per batch

Dross process:

20% metal recovered
80% chlorides, Al oxides, Na, F goes to
2 Wheelabrator-Frye baghouses

2) Barmet of Indiana, Inc.

Dross recycling plant - not scrap

Currently installing 3 baghouses (1.5 million dollars)

design gas vol. 80,000 cu.ft./min.
380° F
AP = 4" H_2O
eff. = 99.5% (design)
Nomex bags - 44,160 sq.ft. filter area
A/C = 1.81:1
Collects NaCl and Al_2O_3

Raw materials:

NaCl - 3,420 lb/hr
Alum. dross - 4,050 lb/hr

Process wt. through baghouse: 7,470 lb/hr (32,719 tons/yr)

1976 melting operations - rotary furnace

nat. gas fired - 146,000 MCF/yr (16.7 MCF/hr)
metal cast - .875 ton/hr, 21 ton/day, 7,665 ton/yr
charge composition - Al furnace skim: 67%
NaCl: 33%

An emission sampling test is attached.

Draft 3-31-76

EMISSION SAMPLING TEST

BARMET

ROCKPORT, INDIANA

February 24, 1976

Conducted By:

Indiana State Board of Health

Air Pollution Control Division

Emissions Sampling Section

INTRODUCTION

On February 24, 1976, total particulate and particulate fluoride and chloride tests were conducted at the Barmet Plant Number two in Rockport, Indiana. The tests were conducted in conjunction with ambient suspended particulate sampling to determine the compliance status of the plant with Indiana APC-5 and APC-20.

The particulate samples collected from the stack were analytically compared to the ambient samples. The testing was conducted in accordance with the State of Indiana, Air Pollution Control Board's Source Sampling Policy and EPA Method 5.

Test Personnel:

Indiana State Board of Health
Air Pollution Control Division
Emissions Sampling Section
Paul Dubenetzky, Chief
Daniel F. Hancock
Philip A. Peterson
Richard T. Sekula

Process Information

Barmet is an aluminum dross reclaimation plant. Plant 2 consists of three rotary furnaces whose emissions are controlled by baghouses. A water spray is introduced to the gas stream to cool it to approximately 250°F prior to entering the baghouse. The gases exit from individual stacks sixty feet above ground.

The furnaces are charged with lump and dust dross and sodium chloride. The average charge for the testing period was 33,390 pounds. This can be broken down as 11,130 pounds lump dross, 9120 dust dross, and 13,140 pounds sodium chloride. The dross is processed for four hours. The furnace is then tapped and depending on the aluminum content of the dross, between 4,500 and 12,000 pounds of aluminum are recovered.

The torn bags were replaced on February 23, but not changed on the baghouse tested on the 24th at the request of Paul Dubenetzky of the Indiana State Board of Health. Daily replacement of torn bags is said to be normal operating procedure and four bags were replaced on the other operating baghouse on February 24.

Sampling and Analytical Procedures

The particulate test was conducted using the sampling train shown in Appendix IV. The particulate matter was collected by the filter located in the heated portion of the sample box. Moisture content was determined by condensing the water vapor in the impinger train located in the ice bath portion of the sample box. Carbon Dioxide and oxygen content of the exhaust gas was measured using Bacharach Fyrite analyzers.

Three 96 minute sampling runs comprised the test. The temperature and velocity pressure of the flue gas was measured at each sampling point while collecting the sample at that point. The flow rate in the sampling line was adjusted according to the Isokinetic Sampling Formula (Appendix II).

The middle furnace in the row of three furnaces was sampled for this test. Samples were collected only during the charging operation to obtain worse case emissions. Since this furnace's operation cannot be considered to be identical

to the other, both furnaces cannot be assumed to have equal emission rates. The western most furnace was not operating during the test. Visible emissions evaluation was not possible due to not being able to distinguish the steam in the plume from the particulate emissions.

Only total particulate was originally planned to be sampled with a chloride analysis to be conducted to connect the plant emissions to the ambient particulate samples. During the test U. S. EPA representative James Adams requested a fluoride analysis. Since laboratory distilled water is necessary to collect gaseous fluorides and this was not available to the Emission Sampling Section, only particulate fluorides could be collected. Other chemical species were analyzed on both the stacks, emission and ambient samples. A separate report will be prepared on these analyses, but a summary of the species and the analytic method can be found below:

CHEMICAL SPECIES	ANALYTICAL METHOD
Total Particulate	Gravimetric
Fluorides	Specific ion Electrode
Chlorides	Potentiometric Silver Nitrate Titration
Aluminum	Fluorometric Determination
Manganese, Magnesium, Calcium, Sodium	Atomic Absorption

RESULTS SUMMARY

The particulate emission rate was calculated by determining the particulate concentration and multiplying by the gas flow rate in the stack. These calculations can be found in Appendix VII. The results of the emissions test are tabulated below:

(lbs/hr) Total for both Furnaces	Run No.1	Run No.2	Run No.3	Average
Maximum Allowable Total Particulate Emiss.Rate	17.0	17.0	17.0	17.0
Total Part.Rate (lbs/hr)	8.04	9.98	16.6	11.5
Part.Fluoride Rate (lbs/hr)	0.20	0.36	0.22	0.26
Isokinetic Sampling Rate (%)	106	100	104	103

MAXIMUM ALLOWABLE EMISSION RATE

Particulate emissions from process operation are regulated by Indiana APC-5 (Appendix). Process weight for the middle furnace was monitored and the average charge was determined to be 33,390 pounds. Since the operating cycle is four hours this represents a process weight rate of 8348 pounds per hour. Even though the second furnace's emissions cannot be assumed to be equal to the one which was tested, its process weight rate can be considered as roughly equal. Therefore the total process weight rate for plant two was 16695 pounds per hour or 8.35 tons per hour. Calculation of the maximum allowable emission rate for process weight rates less than 60,000 pounds per hour is accomplished using the following equation:

$$E = 4.10\ P^{0.67}$$

where: E = rate of emission in pounds per hour

P = Process weight rate in tons per hour

$$E = 4.10\ P^{0.67}$$

$$E = 4.10\ (8.35)^{0.67}$$

$$E = 17.0 \text{ pounds per hour}$$

Industry and Agency Correspondence and Information

The following section contains the correspondence sent to various industries and regulatory agencies and the responses and information (if any) received from them. Two emission test reports are not included due to their large size. One is from The Allied Metal Company in Chicago, Illinois, and the other is from IERL in Cincinnati, Ohio, concerning The Rochester Smelting and Refining Co. Both reports deal with the coated baghouse. These reports are available from either TRC or EPA upon request.

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF ENVIRONMENTAL RESOURCES
Post Office Box 2063
Harrisburg, Pennsylvania 17120

June 15, 1978

TRC
125 Silas Deane Highway
Wethersfield, Connecticut 06109

Attention: Mr. Ed Brookman

Gentlemen:

As requested in our telephone conversation of June 7, 1978 I am sending a copy of the emission inventory form for the Gettysburg Foundry Specialities Company for the calendar year 1976.

If you have further questions regarding this matter please do not hesitate to contact me.

Very truly yours,

James R. Benson

James R. Benson
Chief, Case Section
Division of Abatement and Compliance
Bureau of Air Quality Control

Enclosure

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION G2

FIRM CODE 23-1524437 PLANT: 01

ADDS ONLY-TRANSACTION

F1 FIRM NAME (101)	PLANT NAME (102)	SIC CODE (103)	LOCATION CODE (104)	POLITICAL SUBDIVISION AND COUNTY NAME	AP-FILE NUMBER (105)	NEDS—ID NUMBER	ON-SITE DISPOSAL? (106)	OPEN BURN? (107)	FAC CLASS	DATE-LAST UPDATED (108)
GETTYSBURG FOUNDRY SPECIALTIES CO.		3361	01911	XXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXX	XX-0006	XXXX	NO	NO	X	09-77

F2 STREET---PLANT ADDRESS---CITY (109) (110)	ZIP (111)	F3 FIRST--OFFICIAL'S NAME--LAST (112) (113)	AREA CODE (114)	PHONE NUMBER (115)	MAP (116)	GEOGRAPHIC CODE LATITUDE (117)	LONGITUDE (118)	ELEVATION (119)
P.O. BOX 421 R.D. 2 GETTYSBURG	17325	ROBERT L. WHITE	717	334-7661	09-15-3	395347	771117	570

EMISSIONS-T/YR

	PART	SOX	HC	NOX	CO	HAZARDOUS
ACTUAL	Z,ZZZ,ZZX	Z,ZZZ,ZZX	Z,ZZZ,ZZX	ZZZ,ZZX	ZZZ,ZZX	XXXX, XXXX
POTENTIAL	Z,ZZZ,ZZX	Z,ZZZ,ZZX	Z,ZZZ,ZZX	ZZZ,ZZX	ZZZ,ZZX	XXXX, XXXX

NUMBER OF

PROCESSES	COMBUSTION-UNITS	INCINERATORS	CONTROLS	STACKS
XXX	XXX	XXX	XXX	XXX

PERMIT NUMBERS XX-XXX-XXX, XX-XXX-XXX, XX-XXX-XXX, XX-XXX-XXX,

ORDER NUMBERS: XXXXXX, XXXXXX

CONTROL EQUIPMENT

ID NUMBER (801)	F4 NAME (802)	MFR CODE (803)	DATE INSTALLED (804)	TYPE CODE (805)	PD IN (806)	POLLUTANT CONTROLLED (807)	EFF+ % (808)	EFF CODE (809)	ADD'L POLL CONTROLLED (810) F5	EFF+ % (811)	EFF CODE (812)	ADD'L POLL CONTROLLED (813)	EFF+ % (814)	EFF CODE (815)	LINK CODES A B C (816/817/818)
C01	CYCLONE, QUINN BROS.-2	224	03-00-74	11	2	P000	10.00	B							D01
D01	BAGHOUSE, CARBORUNDUM-40B	290	03-00-74	32	4	P000	99.90	B							S01
C03	CYCLONE, QUINN BROS.-2	224	07-00-75	11	2	P000	10.00	B							D03
D03	BAGHOUSE, CARBORUNDUM-360	290	07-00-75	32	1	P000	99.90	B							S03
D06	BAGHOUSE, PARSONS	174	06-00-71	32	3	P000	99.90	B							S06

STACK DATA

ID (851)	HEIGHT-FT (852) F6	DIA.-FT. (853)	EXHAUST-VOL+ (854)	MOIST-%+ (855)	TEMP-F+ (856)	OPACITY-% (857)
S01	25	2.0	51.200	4	125	0
S03	25	2.0	40.000	4	125	0
S05	60	2.0	3.020	17	1.200	0
S06	18	1.0	4.000	2	70	0

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION 02

FIRM CODE: 23-1524437 PLANT: 01 PROCESS-ID: 101

ADDS ONLY-TRANSACTION

NAME OR TYPE OF PROCESS OR OPERATION (502)	PROCESS CODE (503)	MATERIAL PROCESSED OR PRODUCED-NAME/CODE (504) (505)	NEDS SCC CODE (506)	PERMIT-NUM (507)	ORDER-NUM (508)
BLYM. RECYCEB. EVEVASE "S"	33347	BLYMINVS	2	30400103	01-398-001

AMOUNT (509)	ANNUAL THRUPUT (510)	UNITS/CODE (511)	YEAR (512)	AVERAGE THRUPUT/HR (513)	MAX/HR-OPER CAP LIMIT-UNITS/CODE (514)	INSTALLATION-DATE (515)
1.638.0	XXXXXXXXXXXXXXXXX	02	76	2.22X.X XXXXXXXX	839.0 XXXXXXXXXXXXXXXXX 01	01-00-65

PROCESS EXHAUST ACTUAL-VOLUME (516)+	STANDARD-VOLUME (518)+	ACTUAL %-MOIST (517)	ACTUAL TEMP-F (519)	HOURS-OPERATED AVE/D (520)	DAY/YR (521)	TOTAL/YR (522)	% THRUPUT PER QUARTER 1st (523)	2nd (524)	3rd (525)	4th (526)	LINK CODES A (527)	B (528)	C (529)
34.132	22.265	4	320	24.0	238	5.460	17	38	28	17	105	505	---

FUEL DATA

FUEL CODE (530)	TYPE	RATED INPUT BTU (531)	ANNUAL AMOUNT (532)	UNIT (533)	SULF % (534)	ASH % (535)	BTU/LB+ GAL-FT3 (536)	HOURS OPERATED AVE/D (537)	DAY/YR (538)	TOTAL/YR (539)	% THRUPUT/QUARTER 1st (539)	2nd (540)	3rd (541)	4th (542)
P25	XXXXXXXXXXXXXXXXX	3.000.000	16.380	XXXXXXXXXXXXXXXXX 96	0.0	0.0	1.000	24.0	238	5.460	17	38	28	17
---	XXXXXXXXXXXXXXXXX	---	---	XXXXXXXXXXXXXXXXX --	---	---	---	---	---	---	---	---	---	---

EMISSION DATA—BASED ON FIELDS 509 AND 520

POLLUTANT	CODE (561)	FUEL ID (562)	STACK ID (563)	POTENTIAL EMISSIONS LBS/HR+ (563)	BASIS	CODE (564)	REL IAB (565)	ACTUAL EMISSIONS LBS/HR+ (566)	TONS/YEAR+ (567)	BASIS	CODE (568)	REL IAB (569)	ALLOWABLE EMISSIONS LBS/HR+ (570)	CALC-CODE (571)	REGULATION (572)
XXXXXXXXX	P000	--	501	11.1	XXXXXXXXXX	5	4	0.0	0.0	XXXXXXXXXX	8	3	1.2	272	123.13
XXXXXXXXX	B000	25	505	0.7	XXXXXXXXXX	5	3	0.7	1.7	XXXXXXXXXX	5	3	---	---	---
XXXXXXXXX	E000	--	501	1.9	XXXXXXXXXX	3	2	1.9	5.3	XXXXXXXXXX	1	2	---	---	---
XXXXXXXXX	Z000	--	501	1.0	XXXXXXXXXX	6	7	1.0	2.7	XXXXXXXXXX	6	7	---	---	---
XXXXXXXXX	----	--	----	---	XXXXXXXXXX	-	-	---	---	XXXXXXXXXX	-	-	---	---	---
XXXXXXXXX	----	--	----	---	XXXXXXXXXX	-	-	---	---	XXXXXXXXXX	-	-	---	---	---
XXXXXXXXX	----	--	----	---	XXXXXXXXXX	-	-	---	---	XXXXXXXXXX	-	-	---	---	---
XXXXXXXXX	----	--	----	---	XXXXXXXXXX	-	-	---	---	XXXXXXXXXX	-	-	---	---	---
XXXXXXXXX	----	--	----	---	XXXXXXXXXX	-	-	---	---	XXXXXXXXXX	-	-	---	---	---

part.

NOx

HC

total organic compounds

other toxic substances

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION G2

FIRM CODE: 27-1524437 PLANT: 01 PROCESS-ID: 101

ADOS ONLY-TRANSACTION

NAME OR TYPE OF PROCESS OR OPERATION (502)	PROCESS CODE (503)	MATERIAL PROCESSED OR PRODUCED-NAME/CODE (504)	(505)	NEDS SCC CODE (506)	PERMIT-NUM (507)	ORDER-NUM (508)
ALUM. BRIGGS EXHAUST "E"	33941	ALUMINUM	2	30400103	100-306-10	

AMOUNT (509)	ANNUAL THRUPUT	UNITS/CODE (510)	YEAR (511)	AVERAGE THRUPUT/HR	MAX/HR-OPER CAP LIMIT-UNITS/CODE (512)	(513)	INSTALLATION-DATE (514)
0.846.2	XXXXXXXXXXXXXXXXXX	02	76	2.22X.X XXXXXXXX	0.603.1 XXXXXXXXXXXXXXXXXX	10	03-00-69

PROCESS EXHAUST ACTUAL-VOLUME (515)+	STANDARD-VOLUME (516)+	ACTUAL %-MOIST (517)	ACTUAL TEMP-F (518)	HOURS-OPERATED AVE/D (519)	DAY/YR (520)	TOTAL/YR (521)	% THRUPUT PER QUARTER 1st (521)	2nd (522)	3rd (523)	4th (524)	LINK CODES A (525)	B (526)	C (527)
22.122	22.245	4	320	24.0	228	5.460	27	28	28	17	105	505	

FUEL DATA

FUEL CODE (530)	TYPE	RATED INPUT BTU (531)	ANNUAL AMOUNT (532)	UNIT	CODE (533)	SULF % (534)	ASH % (535)	BTU/LB+ GAL-FT3 (536)	HOURS OPERATED AVE/D (537)	DAY/YR (543)	TOTAL/YR (538)	% THRUPUT/QUARTER 1st (539)	2nd (540)	3rd (541)	4th (542)
P25	XXXXXXXXXXXXXXXXXX	3.000.000	16.380	XXXXXXXXXXXXXXXXXX	06	0.0	0.0	1.000	24.0	228	5.460	27	28	28	17
	XXXXXXXXXXXXXXXXXX			XXXXXXXXXXXXXXXXXX											

EMISSION DATA—BASED ON FIELDS 509 AND 520

POLLUTANT	CODE (561)	FUEL ID (562)	STACK ID (573)	POTENTIAL EMISSIONS LBS/HR+ (563)	BASIS	CODE (564)	REL IAB (565)	ACTUAL EMISSIONS LBS/HR+ (566)	TONS/YEAR+ (567)	BASIS	CODE (568)	REL IAB (569)	ALLOWABLE EMISSIONS LBS/HR+ (570)	CALC-CODE (571)	REGULATION (572)
XXXXXXXXXX	P000	--	501	1.8	XXXXXXXXXX	5	4	0.0	0.0	XXXXXXXXXX	8	3	1.4	202	123.12
XXXXXXXXXX	E000	--	501	1.9	XXXXXXXXXX	3	2	1.9	5.3	XXXXXXXXXX	3	2			
XXXXXXXXXX	Z000	--	501	1.0	XXXXXXXXXX	6	7	1.0	2.7	XXXXXXXXXX	6	7			
XXXXXXXXXX	8000	25	505	0.7	XXXXXXXXXX	5	3	0.7	1.7	XXXXXXXXXX	5	3			
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION 02

FIRM CODE: 33-1524437 PLANT: 01 PROCESS-ID: 103

ADDS ONLY-TRANSACTION

NAME OR TYPE OF PROCESS OR OPERATION (502)	PROCESS CODE (503)	MATERIAL PROCESSED OR PRODUCED-NAME/CODE (504)	(505)	NEDS SCC CODE (506)	PERMIT-NUM (507)	ORDER-NUM (508)
ALUM. REVERB. FURNACE "A"	33941	ALUMINUM	2	30400103	01-308-002	

AMOUNT (509)	ANNUAL THRUPUT	UNITS/CODE (510)	YEAR (511)	AVERAGE THRUPUT/HR	MAX/HR—OPER CAP LIMIT—UNITS/CODE (512)	(513)	INSTALLATION-DATE (514)
2,394.0	XXXXXXXXXXXXXXXX	03	76	1039.0 2,22X.X XXXXXXXX	2,160.0 XXXXXXXXXXXXXXXX	01	03-00-72

PROCESS EXHAUST ACTUAL-VOLUME (515)+	STANDARD-VOLUME (516)+	ACTUAL %-MOIST (517)	ACTUAL TEMP-F (518)	HOURS-OPERATED AVE/D (519)	DAY/YR (520)	TOTAL/YR (520)	% THRUPUT PER QUARTER 1st (521)	2nd (522)	3rd (523)	4th (524)	LINK CODES A (525)	B (526)	C (527)
26,667	17,395	4	320	24.0	192	4,608	22	33	33	12	C03	S05	

FUEL DATA

FUEL CODE (530)	TYPE	RATED INPUT BTU (531)	ANNUAL AMOUNT (532)	UNIT	CODE (533)	SULF % (534)	ASH % (535)	BTU/LB+ GAL-FT3 (536)	HOURS OPERATED AVE/D (537)	DAY/YR (543)	TOTAL/YR (538)	% THRUPUT/QUARTER 1st (539)	2nd (540)	3rd (541)	4th (542)
P25	XXXXXXXXXXXXXXXX	3,000,000	12,670	XXXXXXXXXXXXXXXX	06	0.0	0.0	1,000	24.0	176	4,224	13	36	36	15
P02	XXXXXXXXXXXXXXXX	3,000,000	8,000	XXXXXXXXXXXXXXXX	03	0.5	0.05	140,000	24.0	16	384	100	0	0	0

EMISSION DATA—BASED ON FIELDS 509 AND 520

	POLLUTANT	CODE (561)	FUEL ID (562)	STACK ID (573)	POTENTIAL EMISSIONS LBS/HR+ (563)	BASIS	CODE (564)	REL IAB (565)	ACTUAL EMISSIONS LBS/HR+ (566)	TONS/YEAR+ (567)	BASIS	CODE (568)	REL IAB (569)	ALLOWABLE EMISSIONS LBS/HR+ (570)	CALC-CODE (571)	REGULATION (572)
	XXXXXXXXXX	P000	--	S03	2.2	XXXXXXXXXX	5	4	0.0	0.0	XXXXXXXXXX	8	3	1.5	272	123.13
	XXXXXXXXXX	F000	--	S03	1.8	XXXXXXXXXX	3	2	1.8	4.1	XXXXXXXXXX	3	2			
	XXXXXXXXXX	Z000	--	S03	0.9	XXXXXXXXXX	6	7	0.9	2.1	XXXXXXXXXX	6	7			
	XXXXXXXXXX	B000	25	S05	0.7	XXXXXXXXXX	5	3	0.7	1.5	XXXXXXXXXX	5	3			
SOX	XXXXXXXXXX	C000	02	S05	1.5	XXXXXXXXXX	5	3	1.5	3.4	XXXXXXXXXX	5	3	86.7	520	123.21
CO	XXXXXXXXXX	A000	02	S05	0.1	XXXXXXXXXX	5	3	0.1	0.2	XXXXXXXXXX	5	3			
	XXXXXXXXXX	B000	02	S05	1.2	XXXXXXXXXX	5	3	1.2	2.9	XXXXXXXXXX	5	3			
	XXXXXXXXXX	----	--	----		XXXXXXXXXX	-	-			XXXXXXXXXX	-	-			
	XXXXXXXXXX	----	--	----		XXXXXXXXXX	-	-			XXXXXXXXXX	-	-			

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION 02

FIRM CODE 23-151497 PLANT: 01 PROCESS-ID: 104

ADDS ONLY-TRANSACTION

NAME OR TYPE OF PROCESS OR OPERATION (502)	PROCESS CODE (503)	MATERIAL PROCESSED OR PRODUCED-NAME/CODE (504) (505)	NEDS SCC CODE (506)	PERMIT-NUM (507)	ORDER-NUM (508)
ALUM. SWEAT FURNACE	33147	16ay ALUMINUM	1	30401010	221-BOE-10

AMOUNT (509)	ANNUAL THRUPUT	UNITS/CODE (510)	YEAR (511)	AVERAGE THRUPUT/HR	MAX/HR-OPER CAP LIMIT-UNITS/CODE (512)	(513)	INSTALLATION-DATE (514)
284.0	XXXXXXXXXXXXXXXXX	03	76	150.3 2,224.X XXXXXXXX	200.0 XXXXXXXXXXXXXXXXX	10	04-00-69

PROCESS EXHAUST ACTUAL-VOLUME (515)+	STANDARD-VOLUME (516)+	ACTUAL %-MOIST (517)	ACTUAL TEMP-F (518)	HOURS-OPERATED AVE/D (519)	DAY/YR (520)	TOTAL/YR (520)	% THRUPUT PER QUARTER 1st (521)	2nd (522)	3rd (523)	4th (524)	LINK CODES A (525)	B (526)	C (527)
24,467	17,335	4	320	24.0	152	3,780	31	40	29	0	203		

FUEL DATA

FUEL CODE (530)	TYPE	RATED INPUT BTU (531)	ANNUAL AMOUNT (532)	UNIT	CODE (533)	SULF % (534)	ASH % (535)	BTU/LB+ GAL-FT3 (536)	HOURS OPERATED AVE/D (537)	DAY/YR (543)	TOTAL/YR (538)	% THRUPUT/QUARTER 1st (539)	2nd (540)	3rd (541)	4th (542)
P25	XXXXXXXXXXXXXXXXX	3,000,000	11,340	XXXXXXXXXXXXXXXXX	06	0.0	0.0	1,000	24.0	152	3,780	31	40	29	0
	XXXXXXXXXXXXXXXXX			XXXXXXXXXXXXXXXXX											

EMISSION DATA--BASED ON FIELDS 509 AND 520

POLLUTANT	CODE (561)	FUEL ID (562)	STACK ID (573)	POTENTIAL EMISSIONS LBS/HR+ (563)	BASIS	CODE (564)	REL IAB (565)	ACTUAL EMISSIONS LBS/HR+ (566)	TONS/YEAR+ (567)	BASIS	CODE (568)	REL IAB (569)	ALLOWABLE EMISSIONS LBS/HR+ (570)	CALC-CODE (571)	REGULATION (572)
XXXXXXXXXX	P099	--	S03	1.1	XXXXXXXXXX	5	4	0.0	0.0	XXXXXXXXXX	8	3	1.3	271	123.13
XXXXXXXXXX	P099	--	S03	1.0	XXXXXXXXXX	6	2	1.0	1.9	XXXXXXXXXX	6	2			
XXXXXXXXXX	P099	--	S03	0.7	XXXXXXXXXX	5	3	0.7	1.3	XXXXXXXXXX	5	3			
XXXXXXXXXX		--			XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX		--			XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX		--			XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX		--			XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX		--			XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX		--			XXXXXXXXXX					XXXXXXXXXX					

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION G2

FIRM CODE 77-1524477 PLANT: 01 PROCESS-ID: 105

ADDS ONLY-TRANSACTION

NAME OR TYPE OF PROCESS OR OPERATION (502)	PROCESS CODE (503)	MATERIAL PROCESSED OR PRODUCED-NAME/CODE (504) (505)	NEDS SCC CODE (506)	PERMIT-NUM (507)	ORDER-NUM (508)
BLUM. SHIP DRYER	33452	BLUM. TURNINGS 1	30400199		

AMOUNT (509)	ANNUAL THRUPUT	UNITS/CODE (510)	YEAR (511)	AVERAGE THRUPUT/HR	MAX/HR-OPER CAP LIMIT-UNITS/CODE (512) (513)	INSTALLATION-DATE (514)
180.0	XXXXXXXXXXXXXXXXXX	01	76	300.0 2,222.X XXXXXXXX	1,000.0 XXXXXXXXXXXXXXXXXX 01	07-00-69

PROCESS EXHAUST ACTUAL-VOLUME (515)+	STANDARD-VOLUME (516)+	ACTUAL %-MOIST (517)	ACTUAL TEMP-F (518)	HOURS-OPERATED AVE/D (519)	DAY/YR (520)	TOTAL/YR (520)	% THRUPUT PER QUARTER 1st (521)	2nd (522)	3rd (523)	4th (524)	LINK CODES A (525)	B (526)	C (527)
1,130	300	17	1,200	8.0	150	1,200	20	30	30	20	505	---	---

FUEL DATA

FUEL CODE (530)	TYPE	RATED INPUT BTU (531)	ANNUAL AMOUNT (532)	UNIT	CODE (533)	SULF % (534)	ASH % (535)	BTU/LB+ GAL-FT3 (536)	HOURS OPERATED AVE/D (537)	DAY/YR (543)	TOTAL/YR (538)	% THRUPUT/QUARTER 1st (539)	2nd (540)	3rd (541)	4th (542)
GAS	XXXXXXXXXXXXXXXXXX	7,000,000	3,000	XXXXXXXXXXXXXXXXXX	96	0.0	0.0	1,000	8.0	150	1,200	20	30	30	20
	XXXXXXXXXXXXXXXXXX			XXXXXXXXXXXXXXXXXX											

EMISSION DATA—BASED ON FIELDS 509 AND 520

POLLUTANT	CODE (541)	FUEL ID (542)	STACK ID (573)	POTENTIAL EMISSIONS LBS/HR+ (543)	BASIS	CODE (544)	REL IAB (545)	ACTUAL EMISSIONS LBS/HR+ (546)	TONS/YEAR+ (547)	BASIS	CODE (548)	REL IAB (549)	ALLOWABLE EMISSIONS LBS/HR+ (570)	CALC-CODE (571)	REGULATION (572)
XXXXXXXXXX	E002	--	505	6.0	XXXXXXXXXX	6	7	0.1	0.1	XXXXXXXXXX	6	7			
XXXXXXXXXX	0800	25	505	0.7	XXXXXXXXXX	5	3	0.7	0.4	XXXXXXXXXX	5	3			
XXXXXXXXXX	2000	--	505	0.1	XXXXXXXXXX	6	7	0.1	0.1	XXXXXXXXXX	6	7	0.1	114	123.12
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					
XXXXXXXXXX					XXXXXXXXXX					XXXXXXXXXX					

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF AIR QUALITY AND NOISE CONTROL

FORMATS VERSION G2

FIRM CODE: 22-1524437 PLANT: 01 PROCESS-ID: 106

ADDS ONLY-TRANSACTION

NAME OR TYPE OF PROCESS OR OPERATION (502)	PROCESS CODE (503)	MATERIAL PROCESSED OR PRODUCED-NAME/CODE (504) (505)	NEDS SCC CODE (506)	PERMIT-NUM (507)	ORDER-NUM (508)
DROSS MILL (SECOND MILL)	33654	ALUM. DROSS	1	30502177	

AMOUNT (509)	ANNUAL THRUPUT	UNITS/CODE (510)	YEAR (511)	AVERAGE THRUPUT/HR	MAX/HR-OPER CAP LIMIT-UNITS/CODE (512)	(513)	INSTALLATION-DATE (514)
1,300.0	XXXXXXXXXXXXXXXXXX	02	96	1999.2 2,222.2 XXXXXXXX	2,000.0 XXXXXXXXXXXXXXXXXX	10	09-20-30

PROCESS EXHAUST ACTUAL-VOLUME (515)+	STANDARD-VOLUME (516)+	ACTUAL %-MOIST (517)	ACTUAL TEMP-F (518)	HOURS-OPERATED AVE/D (519)	DAY/YR (520)	TOTAL/YR (520)	% THRUPUT PER QUARTER 1st (521)	2nd (522)	3rd (523)	4th (524)	LINK CODES A (525)	B (526)	C (527)
4000	3,920	2	70	8.0	240	1,920	25	30	30	15	906		

FUEL DATA

FUEL CODE (533)	TYPE	RATED INPUT BTU (531)	ANNUAL AMOUNT (532)	UNIT	CODE (533)	SULF % (534)	ASH % (535)	BTU/LB+ GAL-FT3 (536)	HOURS OPERATED AVE/D (537)	DAY/YR (543)	TOTAL/YR (538)	% THRUPUT/QUARTER 1st (539)	2nd (540)	3rd (541)	4th (542)

EMISSION DATA–BASED ON FIELDS 509 AND 520

POLLUTANT	CODE (561)	FUEL ID (562)	STACK ID (563)	POTENTIAL EMISSIONS LBS/HR+ (563)	BASIS	CODE (564)	REL IAB (565)	ACTUAL EMISSIONS LBS/HR+ (566)	TONS/YEAR+ (567)	BASIS	CODE (568)	REL IAB (569)	ALLOWABLE EMISSIONS LBS/HR+ (570)	CALC-CODE (571)	REGULATION (572)
	0000		506	75.0		6	7	0.1	0.1		8	4	1.7	411	123.13

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 12, 1978

Mr. Tom Hendon
U.S. Reduction Co.
P.O. Box 30
4610 Kennedy Avenue
E. Chicago, Indiana 46312

Dear Mr. Hendon:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region.

As noted in the enclosed letter from Mr. Walter Barber of EPA, TRC has been designated by EPA as an authorized representative of the Agency. Therefore, TRC is subject to the provision of 42 U.S.C. 1857c9 (c) respecting confidentiality of methods or processed entitled to protection as trade secrets. If you believe that disclosure of any information requested would reveal trade secrets or other confidential information, you should clearly identify such information. If you wish, you may also set forth reasons for your claim and include supportive data or legal authority at the time the information is submitted (in most cases, there will be an opportunity to do so later if a question concerning public availability of information arises). If no such claim is made, the information may be released to the public without further notice to you.

Due to the relatively short time frame of this screening study, your prompt reply would be very much appreciated. Please let us know if you can meet a June 30, 1978 deadline. Thank you for your voluntary cooperation in this study.

Sincerely,

TRC - THE RESEARCH CORPORATION
of New England

Edward T. Brookman

Edward T. Brookman
Associate Project Engineer

ETB/daa

Attachments

Service tailored to the client's need - backed by research

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

DESIGNATION OF AUTHORIZED REPRESENTATIVE

The Research Corporation of New England (TRC), is hereby designated an Authorized Representative of the Administrator of the U. S. Environmental Protection Agency for purposes of (i) assisting in the development of any implementation plan under 42 USC 1857c-5, or 42 USC 1856-c(d), any standard of performance under 42 USC 1856c-6, or any emission standard under 42 USC 1857c-7, (ii) determining whether any person is in violation of any such standard or any requirement of such a plan, or (iii) carrying out 42 USC 1857h-1.

This designation is made pursuant to the Clean Air Act, 42 USC 1857c-9. The United States Code provides that, upon presentation of this credential, the Authorized Representative named herein: (A) shall have a right of entry to, upon, or through any premises in which an emission source is located or in which records required to be maintained under 42 USC 1857c-9(a)(1) are located, and (B) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under 42 USC 1857c-9(a)(1), and sample any emissions which the owner or operator of such source is required to sample.

Authorized Representatives of the Administrator are subject to the provisions of 42 USC 1857c-9(c) respecting confidentiality of methods or processes entitled to protection as trade secrets.

Date: 5-30-78

Designation Expires: September 30, 1978

for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 12, 1978

Mr. Matt Lydon
Apex International Alloys, Inc.
Suite 215
2340 Des Plaines Avenue
Des Plaines, Illinois 60018

Dear Mr. Lydon:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region.

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Associate Project Engineer

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Date: 5-30-78

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for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 12, 1978

Mr. Jack Eagan
Manager of Environmental Control
Metals Division
Vulcan Materials Company
P.O. Box 720
Sandusky, Ohio 44870

Dear Mr. Eagan:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region.

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Edward T. Brookman
Associate Project Engineer

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Date: 5-30-78

Designation Expires: September 30, 1978

for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 8, 1978

Mr. Andrew Sunderland
State Board of Health
Air Pollution Control Division
1330 W. Michigan Avenue
Indianapolis, Indiana 46206

Dear Mr. Sunderland:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region. Additionally, information on the best controlled plants in your region would be appreciated.

As noted in the enclosed letter from Mr. Walter Barber of EPA, TRC has been designated by EPA as an authorized representative of the Agency. Therefore, TRC is subject to the provision of 42 U.S.C. 1857c9 (c) respecting confidentiality of methods or processed entitled to protection as trade secrets. If you believe that disclosure of any information requested would reveal trade secrets or other confidential information, you should clearly identify such information. If you wish, you may also set forth reasons for your claim and include supportive data or legal authority at the time the information is submitted (in most cases, there will be an opportunity to do so later if a question concerning public availability of information arises). If no such claim is made, the information may be released to the public without further notice to you.

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Sincerely,

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of New England

Edward T. Brookman
Associate Project Engineer

ETB/daa

Attachments

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

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Authorized Representatives of the Administrator are subject to the provisions of 42 USC 1857c-9(c) respecting confidentiality of methods or processes entitled to protection as trade secrets.

Date: 5-30-78

Designation Expires: September 30, 1978

for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TABLE I

INFORMATION NEEDED FOR THE EPA SCREENING STUDY OF THE SECONDARY ALUMINUM MANUFACTURING INDUSTRY

1. What is the secondary aluminum production capacity of the plant?
2. What is the number of plant employees involved in the secondary aluminum manufacturing operations?
3. What is the age of the manufacturing facility?
4. Provide a quantitative estimate of past, current and projected production at the plant projected for five years.
5. Indicate any plans for expansion or modification of the production facilities.
6. Provide a brief description of the process employed for secondary aluminum manufacture at the plant, together with flow sheets and a material balance. Pollutant emission locations should be clearly shown.
7. Provide a description and discussion of the emission control systems used in the manufacturing operation. Design and actual removal efficiencies should be specified.
8. Provide a current emissions inventory for the secondary aluminum manufacturing operation at the plant. Separate emissions data should be supplied for each basic step in the manufacturing process and for each emission point. If emissions factors have been developed for the operation, such information should be supplied.

   Specifically, the following format should be used for supplying the emissions data:

Process	Volumetric Flow Rate (temp)	Pollutants	Quantities Generated	Quantities Emitted	% Control

9. Provide any available emission test data from the secondary aluminum manufacturing operations and indicate the availability of such data which is not in your possession. Test methods should be specific and uncontrolled emission data should, if possible, be reduced to the form of emission factors.

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 8, 1978

Ms. Barbara Sidler
Division of Air Pollution Control
Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Dear Ms. Sidler:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region. Table II lists the plants in your region according to our sources of information. If you know of other plants, please include those also. Additionally, information on the best controlled plants in your region would be appreciated.

As noted in the enclosed letter from Mr. Walter Barber of EPA, TRC has been designated by EPA as an authorized representative of the Agency. Therefore, TRC is subject to the provision of 42 U.S.C. 1857c9 (c) respecting confidentiality of methods or processed entitled to protection as trade secrets. If you believe that disclosure of any information requested would reveal trade secrets or other confidential information, you should clearly identify such information. If you wish, you may also set forth reasons for your claim and include supportive data or legal authority at the time the information is submitted (in most cases, there will be an opportunity to do so later if a question concerning public availability of information arises). If no such claim is made, the information may be released to the public without further notice to you.

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Sincerely,

TRC - THE RESEARCH CORPORATION
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Edward T. Brookman

Edward T. Brookman
Associate Project Engineer

ETB/daa

Attachments

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

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Date: 5-30-78

Designation Expires: September 30, 1978

for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TABLE I

INFORMATION NEEDED FOR THE EPA SCREENING STUDY OF THE SECONDARY ALUMINUM MANUFACTURING INDUSTRY

1. What is the secondary aluminum production capacity of the plant?
2. What is the number of plant employees involved in the secondary aluminum manufacturing operations?
3. What is the age of the manufacturing facility?
4. Provide a quantitative estimate of past, current and projected production at the plant projected for five years.
5. Indicate any plans for expansion or modification of the production facilities.
6. Provide a brief description of the process employed for secondary aluminum manufacture at the plant, together with flow sheets and a material balance. Pollutant emission locations should be clearly shown.
7. Provide a description and discussion of the emission control systems used in the manufacturing operation. Design and actual removal efficiencies should be specified.
8. Provide a current emissions inventory for the secondary aluminum manufacturing operation at the plant. Separate emissions data should be supplied for each basic step in the manufacturing process and for each emission point. If emissions factors have been developed for the operation, such information should be supplied.

   Specifically, the following format should be used for supplying the emissions data:

Process	Volumetric Flow Rate (temp)	Pollutants	Quantities Generated	Quantities Emitted	% Control

9. Provide any available emission test data from the secondary aluminum manufacturing operations and indicate the availability of such data which is not in your possession. Test methods should be specific and uncontrolled emission data should, if possible, be reduced to the form of emission factors.

TABLE II

SECONDARY ALUMINUM PLANTS IN ILLINOIS

Town	Company
Alton	U.S. Reduction Company-American Can Company - P.O. Box 30 4610 Melville Avenue, E. Chicago, Indiana 46312
Aurora	Tower Metals and Ore Corporation 332 S. Michigan Avenue, Chicago, Illinois 60604
Bensenville	Carroll (Donald) Metals, Incorporated 201 N. Division Street, Besenville, Illinois 60106
Chicago	Allied Metal Company 2059 S. Canal Street, Chicago, Illinois 60616
Chicago	Apex International Alloys, Incorporated, Division of Alumax, Incorporated - Suite 215, 2340 Des Plaines Avenue, Des Plaines, Illinois 60018
Chicago	Harco Aluminum, Incorporated 4528 W. Division Street, Chicago, Illinois 60651
Chicago	Lavin (R) and Sons, Incorporated 3426 Kedzie Avenue, Chicago, Illinois 60623
Chicago	Lissner Corporation 1000 N. Branch Street, Chicago, Illinois 60622
Chicago Heights	Hall Aluminum Company - P.O. Box 223 17th & State Street, Chicago Heights, Illinois 60411
Lockport	Intercontinental Alloys P.O. Box 920 N. Broadway, Joliet, Illinois 60434
Rockport	Behr (Joseph) and Sons, Incorporated 1100 Seminary Street, Rockford, Illinois 61108

Illinois Environmental Protection Agency 2200 Churchill Road, Springfield, Illinois 62706

217/782-5544

June 27, 1978

JUN 30 1978

Mr. Edward T. Brookman
Associate Project Engineer
The Research Corporation of New England
125 Silas Deane Highway
Weathersfield, Connecticut 06109

Dear Mr. Brookman:

Having reviewed your request for information concerning the secondary aluminum plants located in Illinois and the statement of authority given to you by Walter Barber of USEPA pursuant to 42 USC 1857c9(c), it appears to us that you have adequate authority to request the information directly from the sources.

In light of your authority to request the information directly, we request that you do so. If you are unsuccessful, we will then search our files to determine what we have and what we can release to you in light of the confidential nature of some of the information submitted to us.

Very truly yours,

Barbara Sidler
Senior Technical Advisor
Enforcement Programs

BS:dw/3921-23

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 8, 1978

Mr. Frank Giaccone
Chief - Air Facilities Branch
EPA - Region II
Federal Office Building
26 Federal Plaza
New York, New York 10007

Dear Mr. Giaccone:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region. Table II lists the plants in your region according to our sources of information. If you know of other plants, please include those also. Additionally, information on the best controlled plants in your region would be appreciated.

As noted in the enclosed letter from Mr. Walter Barber of EPA, TRC has been designated by EPA as an authorized representative of the Agency. Therefore, TRC is subject to the provision of 42 U.S.C. 1857c9 (c) respecting confidentiality of methods or processed entitled to protection as trade secrets. If you believe that disclosure of any information requested would reveal trade secrets or other confidential information, you should clearly identify such information. If you wish, you may also set forth reasons for your claim and include supportive data or legal authority at the time the information is submitted (in most cases, there will be an opportunity to do so later if a question concerning public availability of information arises). If no such claim is made, the information may be released to the public without further notice to you.

Due to the relatively short time frame of this screening study, your prompt reply would be very much appreciated. Please let us know if you can meet a June 30, 1978 deadline. Thank you for your voluntary cooperation in this study.

Sincerely,

TRC - THE RESEARCH CORPORATION
of New England

Edward T. Brookman

Edward T. Brookman
Associate Project Engineer

ETB/daa

Attachments

Service tailored to the client's need • backed by research

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

DESIGNATION OF AUTHORIZED REPRESENTATIVE

The Research Corporation of New England (TRC), is hereby designated an Authorized Representative of the Administrator of the U. S. Environmental Protection Agency for purposes of (i) assisting in the development of any implementation plan under 42 USC 1857c-5, or 42 USC 1856-c(d), any standard of performance under 42 USC 1856c-6, or any emission standard under 42 USC 1857c-7, (ii) determining whether any person is in violation of any such standard or any requirement of such a plan, or (iii) carrying out 42 USC 1857h-1.

This designation is made pursuant to the Clean Air Act, 42 USC 1857c-9. The United States Code provides that, upon presentation of this credential, the Authorized Representative named herein: (A) shall have a right of entry to, upon, or through any premises in which an emission source is located or in which records required to be maintained under 42 USC 1857c-9(a)(1) are located, and (B) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under 42 USC 1857c-9(a)(1), and sample any emissions which the owner or operator of such source is required to sample.

Authorized Representatives of the Administrator are subject to the provisions of 42 USC 1857c-9(c) respecting confidentiality of methods or processes entitled to protection as trade secrets.

Date: 5-30-78

Designation Expires: September 30, 1978

for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TABLE I

INFORMATION NEEDED FOR THE EPA SCREENING STUDY OF THE SECONDARY ALUMINUM MANUFACTURING INDUSTRY

1. What is the secondary aluminum production capacity of the plant?
2. What is the number of plant employees involved in the secondary aluminum manufacturing operations?
3. What is the age of the manufacturing facility?
4. Provide a quantitative estimate of past, current and projected production at the plant projected for five years.
5. Indicate any plans for expansion or modification of the production facilities.
6. Provide a brief description of the process employed for secondary aluminum manufacture at the plant, together with flow sheets and a material balance. Pollutant emission locations should be clearly shown.
7. Provide a description and discussion of the emission control systems used in the manufacturing operation. Design and actual removal efficiencies should be specified.
8. Provide a current emissions inventory for the secondary aluminum manufacturing operation at the plant. Separate emissions data should be supplied for each basic step in the manufacturing process and for each emission point. If emissions factors have been developed for the operation, such information should be supplied.

   Specifically, the following format should be used for supplying the emissions data:

Process	Volumetric Flow Rate (temp)	Pollutants	Quantities Generated	Quantities Emitted	% Control

9. Provide any avail le emission test data from the secondary aluminum manufacturing operations and indicate the availability of such data which is not in your possession. Test methods should be specific and uncontrolled emission data should, if possible, be reduced to the form of emission factors.

TABLE II

SECONDARY ALUMINUM PLANTS IN REGION II

State	Town	Company
NJ	Perth Amboy	American Smelting and Refining Company - Federated Metals Division - 120 Broadway, New York, New York 10005
NJ	South Amboy	EASCO Corporation - Aluminum Billets Incorporated 2100 Arlington Federal Building, Baltimore, Maryland 21201
NY	Brooklyn	Belmont Smelting and Refining Works Incorporated 330 Belmont Avenue, Brooklyn, New York 11207
NY	Brooklyn	Elkins (J.R.), Incorporated 518 Gardner Avenue, Brooklyn, New York 11222
NY	Brooklyn	Henning Brothers and Smith, Incorporated 91-115 Scott Avenue, Brooklyn, New York 11237
NY	E. Syracuse	Roth Brothers Smelting Corporation - P.O. Box 158 Thompson Road, E. Syracuse, New York 13200
NY	Long Island City	Paragon Smelting Corporation 36-08 Review Avenue, Long Island City, New York 11101
NY	Rochester	Rochester Smelting and Refining Company, Incorporated - P.O. Box 547 26 Sherer Street, Rochester, New York 14602

United States
Environmental Protection
Agency

Region 2
26 Federal Plaza
New York NY 10007

New Jersey, New York,
Puerto Rico,
Virgin Islands

EPA

June 28, 1978

JUN 30 1978

Mr. Edward T. Brookman
TRC - The Research Corporation
of New England
125 Silas Deane Highway
Wethersfield, Connecticut 06109

Dear Mr. Brookman:

Enclosed are copies of the process information available in EPA Region II or NYSDEC files for the following secondary aluminum smelting plants:

Roth Brothers Smelting Corporation - E. Syracuse, New York
Rochester Smelting & Refining - Rochester, New York
Alcan Aluminum - Oswego, New York
J. R. Elkins, Inc. - Brooklyn, New York

The following firms are no longer in operation:

Paragon Smelting Corporation - Long Island City, New York
Henning Brothers & Smith - Brooklyn, New York
American Smelting & Refining - South Amboy, New Jersey

Neither EPA nor NJDEP have any information concerning an EASCO Corporation plant in South Amboy. To the best of our knowledge no such plant exists. NYSDEC reviewed their Belmont file and it contains no information on Al smelting. We will check further and forward any data we can obtain.

You may wish to contact the sources directly if you require additional detailed information.

Sincerely yours,

F. W. Giaccone, Chief
Air Facilities Branch

Enclosure

EPRINT 06

PGM-CHVASMLE

AIR POLLUTION SOURCE MANAGEMENT SYSTEM

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FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 8

MONROE COUNTY

REPORT DATE 06/16/78

LOCATION FACILITY - 2614000760 NAME - ROCHESTER SMELTING & REFINING
ADDRESS - 26 SHERER ST C-T-V - ROCHESTER
FACILITY CLASSIFICATION - B
SIC - 3341

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00008	3/ 5/78		3/ 5/81	1 5 5	13027	0	C	284.5	781.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
525	35	8	34		1200	21.0	8123.0	F	200	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1		FIRST FLOOR

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 ALUMINUM CRUSHER ROTARY FURNACE FOR REMOVAL
OF COMBINED OIL/WATER FROM CRUSHED ALUMINUM TURNINGS

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							1	4801	1100

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		10	IND FURNACE CO AFTERBURNER SYSTEM	98.15	2		90	15000	40000	6 68	3
2		1									

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	OIL MIST	90	2000.60	1	200.00	8.00	150	3.70	1	.30	5	B	3.70

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
0001A	3/ 5/78		3/ 5/81	1 E E	13767	0	C	284.5	781.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
525	47	7	36		250	38.0	16000.0	I	10	3

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	FOUNDRY	1

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 3 SECONDARY ALUMINUM REVERBRATORY FURNACES

L	CONTROL ID TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
						2		15		
1	98	TELLER ENVIRONMENTAL SYSTEM	95.00				260000	3500	5 73	

PGM-CHVASMLE

AIR POLLUTION SOURCE MANAGEMENT SYSTEM

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 8 MONROE COUNTY REPORT DATE 06/16/78

L	CONTROL ID TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
2	1	ABSORPTION CHROMATOGRAPHIC SYSTEM								

how based

what do they mean

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	PARTICULATES	75			29.10	24.00	260	.03	5	.30	5	A	2.10
B	PARTICULATES	75			2.10	24.00	260	.03	5	.30	5	B	2.10
C	MISC. ORGANICS	990			.50	24.00	260	.02	1	.02	1	D	.02
D	HYDROGEN FLUORIDE	175			.65	24.00	260	.18	1	.18	1	B	.18
E	CHLORINE	160				24.00	260		11		11	A	

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
0001B	3/ 5/78	3/ 5/81	1		13768	0	C	284.5	781.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
525	47	7	36		250	38.0	16000.0	1	10	3

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	FOUNDRY	1

L	NUMBER OF UNITS	PROCESS DISCRIPTION SUMMARY
1		3 SECONDARY ALUMINUM REVERBATORY FURNACES

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							2	15	

L	CONTROL ID TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1	98	TELLER ENVIRONMENTAL	95.00				260000	3500	5 73	
2	1	ABSORPTION CHROMATOGRAPHIC SYSTEM								

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	PARTICULATES	75			29.10	24.00	260	.03	5	.30	5	A	2.10
B	PARTICULATES	75			2.10	24.00	260	.03	5	.30	5	B	2.10
C	MISC. ORGANICS	990			.50	24.00	260	.02	1	.02	1	D	.02
D	HYDROGEN FLUORIDE	175			.65	24.00	260	.18	1	.18	1	B	.18
E	CHLORINE	160				24.00	260		11		11	A	

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
0001C	3/ 5/78	3/ 5/81	1	5 5	13769	0	C	284.5	781.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
525	47	7	36		250	38.0	16000.0	1	10	3

1 FOUNDRY 1

PGM-CNVASMLE

AIR POLLUTION SOURCE MANAGEMENT SYSTEM

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FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 8

MONROE COUNTY

REPORT DATE 06/16/78

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 3 SECONDARY ALUMINUM REVERBATORY FURNACES

PROCESS FUEL SUMMARY SOLID - TYPE QUANTITY SULFUR OIL - TYPE QUANTITY SULFUR GAS - TYPE QUANTITY BTU / HR
2 15

L CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1	98	TELLER ENVIRONMENTAL	95.00				260000	3500	5 73	
2	1	ABSORPTION CHROMATOGRAPHIC SYSTEM								

L CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A PARTICULATES	75			29.10	24.00	260	.03	5	.30	5	A	2.10
B PARTICULATES	75			2.10	24.00	260	.03	5	.30	5	B	2.10
C MISC. ORGANICS	990			.50	24.00	260	.02	1	.02	1	D	.02
D HYDROGEN FLUORIDE	175			.65	24.00	260	.17	1	.18	1	B	.17
E CHLORINE	160				24.00	260		11		11	A	

PGM-CNVASMLE

AIR POLLUTION SOURCE MANAGEMENT SYSTEM

PAGE - 0001

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7

ONONDAGA COUNTY

REPORT DATE 06/16/78

LOCATION FACILITY - 3126010420 NAME - ROTH BROS SMELTING CORP
ADDRESS - 6223 THOMPSON RD C-T-V - DEWITT

FACILITY CLASSIFICATION - B
SIC - 3339

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00001			11/ 1/77	11/ 1/78 1	9212	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	22	22			110	78.0	19500.0	1	320	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99						BLDG 4 PLANT 2	1

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 COPPER ROTARY FURNACE
FOR BURNING OF INSULATION FROM WIRE

PROCESS FUEL SUMMARY SOLID - TYPE QUANTITY SULFUR OIL - TYPE QUANTITY SULFUR GAS - TYPE QUANTITY BTU / HR

L CONTROL ID TYPE MFG AND MODEL NUMBER ACTUAL EFF HOW DET CONTAM CODE COST OP COST DATE INST LIF

1 2 DENTON [illegible]

11 J P ELLIOT ASSOC QUENCH STATION
PEABODY VEN-KINE DC 200-3

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	CHLORINE	160			232.00	8.00	250			11.00	1	B	4.40
B	PARTICULATES	75			90.00	8.00	250			.05	6	B	2.64

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00002		4/ 1/78	4/ 1/80	1	8522	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
409	30	10	24		400	97.0	2870.0	N	300	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	PLANT #2 CRUSHER BLD1	

L	NUMBER OF UNITS	PROCESS DISCRIPTION SUMMARY
1		CLEANED CRUSHED ALUMINUM SCRAP IS MELTED DOWN IN SMALL AMOUNTS TO OBTAIN LAB SAMPLES

PROCESS FUEL SUMMARY	SOLID -	TYPE	QUANTITY	SULFUR	OIL -	TYPE	QUANTITY	SULFUR	GAS -	TYPE	QUANTITY	BTU / HR
										1	2000	1000

PGM-CNVASMLE AIR POLLUTION SOURCE MANAGEMENT SYSTEM PAGE - 0002

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM CODE	COST	OP COST	DATE INST	LIF
1		99								

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ALUMINUM	5			.30	5.00	150	212.00	5	.30	1	D	.30

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00003		11/ 1/77	11/ 1/78	1	9213	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
409	30	6	27		140	100.0	9300.0	I	412	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	PLANT 2 ALUMINUM CRU1	

L	NUMBER OF UNITS	PROCESS DISCRIPTION SUMMARY
1		SCRAP ALUMINUM IS CRUSHED
		& PUT THRU A ROTARY FURNACE
3		TO BURN OFF CONTAMINENTS
		SUCH AS OIL GREASE PAINT ETC
5		SMOKE GENERATED AT BURNING PROCESS
		PASSES THRU AN AFTERBURNER
7		& THEN THRU SCRUBBER

CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1	13	SHOP FABRICATED	95.00			5	16000	14000	7 74	

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ALUMINUM	5			62.00	10.00	220			.05	6	B	3.10

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	----	CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00005	8/20/75 8/20/76	N 4/ 1/78	4/ 1/80	1	E E	8528	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
409	24	8	38		100	42.0	18548.0	F	730	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	PLANT 2 BLDG 6	1ST

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 SCRAP ZINC WITH SOME METAL ATTACHMENTS IS PUT INTO A
ROTARY FURNACE & HEATED TO THE POINT

PGM-CNVASMLE AIR POLLUTION SOURCE MANAGEMENT SYSTEM PAGE - 0003

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
3 WHERE ONLY THE ZINC FLOWS
THIS METAL IS CAST INTO PIGS OR INGOTS
5 NON MELTED METALS ARE REMOVED FROM THE FURNACE
FOR FURTHER PROCESSING AT OTHER DEPARTMENTS

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							1	4600	1000

CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1	8	DUSTY DUSTLESS S228	99.00	2		70	85000	7500	12 75	2

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ZINC	70			60.00	8.00	200			.05	6	B	.60

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	----	CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00006		4/ 1/76	4/ 1/78		E E	8523	0	X	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	30	8	12		150	71.0	3000.0	F	400	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					2	PLANT #1	1

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY

SMALL AMOUNTS OF FLUX POTASH SODIUM CHLORIDE ADDED
CHLORINE USED FOR MAGENSIUM REMOVAL CYCLE 2 HOURS
SMALL AMOUNTS OF ALLOYING INGREDIENTS MAY BE ADDED AS
REQUIRED THE METAL IS THEN CAST INTO INGOTS OR SOWS

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							I	41400	1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM CODE	COST	OP COST	DATE INST	LIF
I		15	H A KNIGHT CUSTOM MADE	95.00	2	190	35000	4000	I 67	I

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	OTHER HALOGEN GAS	190			96.00	4.00	200	212.00	5	4.80	I	B	4.80

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00008		4/ 1/78	4/ 1/80	I	8524	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	30	10	13		850	142.0	3350.0	N	260	0

PGM-CNVASHLE AIR POLLUTION SOURCE MANAGEMENT SYSTEM PAGE - 0004

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					I	PLANT #1 ZAMAK BLDG I	

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
I NEW ZINC IN SLAB FORM IS CHARGED INTO THE REVERBATORY
FURNACE MELTED DOWN ALUMINUM ADDED AS ALLOY
3 INGREDIENT THEN THE METAL IS CAST INTO INGOTS

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							I	4090	1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM CODE	COST	OP COST	DATE INST	LIF
I		99								

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ZINC	70			2.50	20.00	200	212.00	5	.30	5	B	2.50

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00009		4/ 1/76	4/ 1/78	E E	8525	0	X	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	32	12	24		500	42.0	4270.0	E	250	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					2	PLANT #1 ZAMAK BLDG I	

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY

MELTED ANALYZED SPALL & UNITS ALLOY [illegible]
& MAGNESIUM ARE ADDED AS REQUIRED
METAL IS THEN CAST INTO INGOTS

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							1	2140	1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		99									

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ZINC	70			1.70	6.00	50	212.00	5	.30	5	B	1.70

PGH-CNVASMLE

AIR POLLUTION SOURCE MANAGEMENT SYSTEM

PAGE - 0005

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00011		11/ 1/77	11/ 1/78	1	9214	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	25	25	20		100	32.0	3900.0	I	370	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99						PLANT 2	1

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 OUTSIDE INCINERATOR FOR BURNING OF INSULATION
FROM WIRE

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		10	HOME MADE				75				
2		7	CENTRI SPRAY MODIFIED				160				

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	CHLORINE	160			116.00	9.00	250			6.80	1	B	2.20
B	PARTICULATES	75			45.00	9.00	250			.05	6	B	1.32

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00012		12/18/75	11/ 1/78	1 4	9215	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
409	42	12			300	70.0	19000.0	I	350	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	BLDG I PL 2	1

ROTARY FURNACE & POTS FOR SECONDARY LEAD SHELTING
3 ADDITION TO AN EXISTING INSTALLATION IS TO ALLOW
REPAIR & MAINTENANCE WHILE OPERATING
PERMIT INTRODUCTION OF TEMPERING AIR

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		8		99.90	1		50	65000		1 75	2

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	PARTICULATES	75	10880.00		388.00	8.00	240	3.30	20	388.00	20	A	

PGM-CNVASMLE AIR POLLUTION SOURCE MANAGEMENT SYSTEM PAGE - 0006

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00014		4/ 1/78	4/ 1/80	1	8526	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	38	12	36		400	42.0	10620.0	N	420	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	PLANT #1 ALUMINUM SMI	

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 CLEAN ALUM SCRAP CHARGED INTO REVERBAT FURNACE
MELTED ANALYZED SMALL AMOUNTS OF ALLOYING INGREDIENTS
3 SUCH AS COPPER TITANIUM MAGNESIUM ARE ADDED AS REQUIRED
THE METAL IS THEN CAST INTO INGOTS
5 NO FLUXING CLEANING OR CHLORINATION IN THIS FURNACE

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							1	6786	1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		99									

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ALUMINUM	5			1.50	15.00	100	212.00	5	.30	5	B	1.50

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00015		4/ 1/78	4/ 1/80	1	8527	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	26	6	24		300	23.0	3014.0	N	260	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	PLANT #1 ZAMAK BLDG	1

CLEAN ALUMINUM IS MELTED IN THIS FURNACE
THEN TRANSFERRED VIA A CHUTE INTO THE ZAMAK REVERBATORY
3 FURNACE WHERE IT BECOMES AN ALLOYING INGREDIENT

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							I	1156	1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		99									

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	ALUMINUM	5			.67	6.00	200	212.00	5	.67	1	D	.67

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
00016	4/ 6/77 4/ 6/78	N 11/ 1/77 4/ 1/80	1 4		8871	0	C	411.0	769.1

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
404	30	4	60		170	37.6	27312.0	I	70	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
01					1		

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 ALUMINUM TURNINGS ARE CRUSHED THEN PUT THROUGH
A ROTARY FURNACE TO BURN OFF CUTTING OIL
3 MOISTURE - KNOWN AS ALUMINUM CHIP DRYER
KNOWN AS ALUMINUM CHIP DRYER

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							I		1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		10	DENTON REFRACTORY	99.80			90	35000	120	6 70	2

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	PARTICULATES	75			200.80	9.00	220						2.01
B	PARTICULATES	75			200.80	9.00	220						2.01

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
02					1		

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 ZINC SKIMMINGS CONTAINING OIL & DIRT ARE
MELTED IN AN IRON POT SKIMMED & RECAST INTO INGOTS
3 IRON POT SKIMMED & RECAST INTO INGOTS

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		8	ENVIROTECH 5-120-822.5	99.00			5	300000		4 77	2

```
          1   CHAMPION FAN                                                                                                  4 77        2

L CONTAMINANT NAME   CODE     INPUT   UNITS      ERP     HRS/DAY  DAYS/YR   ACTUAL E  UNITS  ALLOWABLE E  UNITS  RATING   LBS/HR
A PARTICULATES        75                        20.00      8.00     150         .02    1                                     .02

*PROCESS   PROCESS  SCC       CLASS                ACTIVITY                      NO. OF
 UNIT ID    CODE   CODE                                                          UNITS   BUILDING NAME       FLOOR NAME / NUMBER
   03                                                                              2


PGM-CNVASMLE                                AIR POLLUTION SOURCE MANAGEMENT SYSTEM                                PAGE - 0008

                                                FACILITY / EP DATA LIST
                                     SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7                                                     ONONDAGA      COUNTY                          REPORT DATE   06/16/78

L NUMBER OF UNITS    PROCESS DISCRIPTION SUMMARY
1                   CLEANED ALUMINUM SCRAP IS CHARGED INTO FURNACES
                    MELTED SMALL AMOUNTS OF FLUX (POTASHSODIUM CHLORIDE)
3                   ADDED DURING CHARGE PERIOD CHLORINE USED FOR MAGNESIUM
                    REMOVAL CYCLE - 2 HOURS SMALL AMOUNTS OF ALLOYING
5                   INGREDIENTS MAY BE ADDED AS REQUIRED THE METAL IS
                    THEN CAST INTO INGOTS OR SOWS (REVERATERY FURNACE)

L CONTROL ID TYPE   MFG AND MODEL NUMBER                        ACTUAL EFF   HOW DET  CONTAM  CODE     COST  OP COST  DATE INST  LIF

1             8   ENVIROTECH 5-120-8-22.5 NORBLO                 99.00                         5      300000              4 77      2

2             1   CHAMPION FAN                                                                                           4 77      2

L CONTAMINANT NAME   CODE     INPUT   UNITS      ERP     HRS/DAY  DAYS/YR   ACTUAL E  UNITS  ALLOWABLE E  UNITS  RATING   LBS/HR
A OTHER  HALOGEN GAS  190                        96.00      4.00     200                                                     .19

*PROCESS   PROCESS  SCC       CLASS                ACTIVITY                      NO. OF
 UNIT ID    CODE   CODE                                                          UNITS   BUILDING NAME       FLOOR NAME / NUMBER
   99                                                                                    1                   ROOF PL 1

PROCESS FUEL SUMMARY   SOLID -   TYPE   QUANTITY   SULFUR   OIL -  TYPE   QUANTITY   SULFUR   GAS -   TYPE   QUANTITY    BTU / HR

L CONTROL ID TYPE   MFG AND MODEL NUMBER                        ACTUAL EFF   HOW DET  CONTAM  CODE     COST  OP COST  DATE INST  LIF

1             8   ENVIROTECH 5-120-8-22.5 NORBLO                 99.00                         5      300000              4 77      2

2             1   CHAMPION FAN (2)                                                                                       4 77      2

L CONTAMINANT NAME   CODE     INPUT   UNITS      ERP     HRS/DAY  DAYS/YR   ACTUAL E  UNITS  ALLOWABLE E  UNITS  RATING   LBS/HR
A PARTICULATES        75                       220.80      8.00     220         .01    6           .05     6      B       2.21

 EMISSION POINT        ----P.C.  DATES ---- TEST  ---- C.O.  DATES ---- CONDITIONS  CERT. NO   CONFID  COMPLIANCE    UTM E     UTM N

      00017            4/ 8/77      4/ 8/78  Y    11/ 1/77     4/ 1/80  1 4           8543       0         C        411.0     769.1

GROUND ELEV   STK HT   HT ABOVE STRUC      DIAMETER   DIMENSIONS     TEMP    VELOCITY   FLOW RATE     DRAFT TYPE  RECEPTOR   MULT-S
    404         32            4              45                       350       41.5     15500.0          I           265        0

*PROCESS   PROCESS  SCC       CLASS                ACTIVITY                      NO. OF
 UNIT ID    CODE   CODE                                                          UNITS   BUILDING NAME       FLOOR NAME / NUMBER
                                                                                        PLANT 2             1
```

NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 ROTARY FURNACE FOR REMOVAL OF VARIOUS TYPES OF
INSULATION FROM COPPER WIRES BY INCINERATION

PROCESS FUEL SUMMARY	SOLID - TYPE	QUANTITY	SULFUR	OIL - TYPE	QUANTITY	SULFUR	GAS - TYPE	QUANTITY	BTU / HR
							1	2200	1000

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
1		10	DENTON REFRACTORY				75	80000	30000	1 74	2

PGM-CNVASMLE AIR POLLUTION SOURCE MANAGEMENT SYSTEM PAGE - 0009

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 ONONDAGA COUNTY REPORT DATE 06/16/78

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF
2		8	ENVIROTECH 3 120 8					260000		3 77	2

L	CONTAMINANT NAME	CODE	INPUT	UNITS	ERP	HRS/DAY	DAYS/YR	ACTUAL E	UNITS	ALLOWABLE E	UNITS	RATING	LBS/HR
A	CHLORINE	160			117.50	8.00	220			7.00	1	B	
B	PARTICULATES	75			90.00	8.00	220			.05	6	B	.90

PGM-CNVASMLE AIR POLLUTION SOURCE MANAGEMENT SYSTEM PAGE - 0010

FACILITY / EP DATA LIST
SPECIAL REPORT FOR DENNIS SANTELLA USEPA

REGION 7 OSWEGO COUNTY REPORT DATE 06/16/78

LOCATION FACILITY - 3556000004 NAME - ALCAN ALUMINUM CORP FACILITY CLASSIFICATION - B
ADDRESS - PO BX 28 C-T-V - OSWEGO SIC - 3553

EMISSION POINT	----P.C. DATES	---- TEST	---- C.O. DATES	---- CONDITIONS	CERT. NO	CONFID	COMPLIANCE	UTM E	UTM N
0000A		10/26/76	9/ 1/79	1 E E	6360	0	C	382.4	816.0

GROUND ELEV	STK HT	HT ABOVE STRUC	DIAMETER	DIMENSIONS	TEMP	VELOCITY	FLOW RATE	DRAFT TYPE	RECEPTOR	MULT-S
346	76	6	36		88	29.0	41496.0	I	1900	0

*PROCESS UNIT ID	PROCESS CODE	SCC CODE	CLASS	ACTIVITY	NO. OF UNITS	BUILDING NAME	FLOOR NAME / NUMBER
99					1	COLD MILL	

L NUMBER OF UNITS PROCESS DISCRIPTION SUMMARY
1 EXHAUST SYSTEM FOR 72" ALUMINUM
COLD ROLLING MILL WHICH USES
3 OIL BASED COOLANG-LUBRICANT.
FUMES FROM MILL DRAWN OFF BY EXHAUST SYSTEM.
5 PASSED THROUGH SCRUBBER AND VENTED TO
ATMOSPHERE AFTER OIL MIST HAS BEEN REMOVED.

L	CONTROL ID	TYPE	MFG AND MODEL NUMBER	ACTUAL EFF	HOW DET	CONTAM	CODE	COST	OP COST	DATE INST	LIF

Rev. 11-72

NEW YORK CITY DEPARTMENT OF AIR RESOURCES
BUREAU OF INDUSTRIAL AIR POLLUTION CONTROL

ENVIRONMENTAL RATING REPORT
Individual Point of Emission

Emis. Pt. No. 101/P 014

(Please follow printed Guidelines to complete this form) 222

1. Company name J.H. Elkins, Inc.,
Premises Address 470 Scott Ave
Borough Brooklyn, N.Y. 11222
Telephone No. 212 356 6/90

2. Emission Point No. 1

3. Report Date 1-30-75

4. Offical use (leave blank)

5. Name of Person Preparing Report Harry G. Savran, P.E. Title Consulting Engr.
Address 186 Joralemon Street, B'klyn, N.Y. Zip 11201 Tel. No. 858 2332

6. Manufacturing Process
Reveling Scrap Aluminum

7. Operation Producing Emission
No air-bourne emissions

8. Process Weight, #/HR
not applicable

9. Emission Rate Potential, #/HR

Dross	Chlorides as HCl	14#/hr
	Magnesium Chloride $MgCl_2$	30#/hr

10. Air Pollution Control Device (s)
"Bell" /system for controlling emissions during chlorination.

Reproduced from best available copy.

Data based on test results of N.Y. Dept of A.P. test report

Control No. 100015 A & B

12. Air Contaminant emissions to outer air.			Concentration at point of discharge to atmosph	
Air Contaminant (chemical name)	State S,L,G	Emission Rate-#/HR	Solids/Liquids mg/cu.m.	gases & vapo ppm by volum
HCl	S	14		
$MgCl_2$	S	30		

13. Air or gas flow rate at operating conditions.
Fan: make_____ model_____ HP_____ RPM_____ p.in. of H_2O_____
Constant flow rate: CFM_____;HRS/day_____;days/yr._____;°F_____
If variable flow rate; describe variation in CFM with respect to time and cycles/hr,/day,/year, as applicable. (as attachment)

14. Physical characteristics at emission point.
a. Gas temperature at point of discharge:_____°F
b. Dimensions of outlet:_____in. diam.;_____in. x_____
c. Height at point of discharge:_____ft. above ground

15. Fuel used as process constituent and/or in control device.
a. Coal:type_____;#/HR_____;% sulfur by Wt._____
b. Oil:grade_____;GPH_____;% sulfur by Wt._____
c. Gas:CFH_____;BTU/Cu.Ft._____
d. Combustion air: CFM_____

16. a. Emission source is existing. x date installed 1969
New x modified X Anticipated completion date NOV. 1975
b. Does emission source have:
Certificate of Environmental Rating; No. PA 179/68 # 239/68 date 1-15-71 Rating 71
Application for Certificate of Operation; No. PA_____ date_____
Notice of Approval (work permit); date issued_____
Certificate of Operation; date issued_____

17. [signature] P.E.
Signature of person preparing report

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. 11-72

NEW YORK CITY DEPARTMENT OF AIR RESOURCES
BUREAU OF INDUSTRIAL AIR POLLUTION CONTROL

ENVIRONMENTAL RATING REPORT
Individual Point of Emission

(Please follow printed Guidelines to complete this form)

1. Company name J.P.Ekins, Inc.,	2. Emission Point No.
Premises Address 470 Scott Ave	1
Borough Brooklyn, N.Y.	3. Report Date
Telephone No. 212 IV 4-6490	10-1-1974

4. Offical use (leave blank)

5. Name of Person Preparing Report Harry G. Savran, P.E. Title P.E.

Address 186 Joralemon Street, B'klyn, N.Y. Zip 11201 Tel. No. 85802332

6. Manufacturing Process

Recycling Scrap Aluminum

7. Operation Producing Emission

Chip Dryer

8. Process Weight, #/HR

3140 #/hr

9. Emission Rate Potential, #/HR

4.680

10. Air Pollution Control Device (s)

Afterburner (fueled with gas burner)

$L = 0.022\ P^{.665}$

$= 0.022 \times 3{,}140^{(0.665)}$

Reproduced from best available copy.

12. Air Contaminant emissions to outer air.			Concentration at point of discharge to atmosph	
Air Contaminant (chemical name)	State S,L,G	Emission Rate-#/HR	Solids/Liquids mg/cu.m.	gases & vapo ppm by volum
Hydrocarbons				

13. Air or gas flow rate at operating conditions.
Fan: make N.Y. Blower model N26P-30 HP 30 RPM 2,600 p,in. of H_2O _____
Constant flow rate: CFM _____ ;HRS/day _____ ;days/yr. _____ ;°F _____
If variable flow rate; describe variation in CFM with respect to time and cycles/hr,/day,/year, as applicable. (as attachment)

14. Physical characteristics at emission point.
a. Gas temperature at point of discharge: 525 °F
b. Dimensions of outlet: 4.2 ft in. diam.; _____ in. x _____ i
c. Height at point of discharge: 70.6 ft. above ground

15. Fuel used as process constituent and/or in control device.
a. Coal: type _____ ;#/HR _____ ;% sulfur by Wt. _____
b. Oil: grade #2 ;GPH _____ ;% sulfur by Wt. _____
c. Gas: CFH x-21,075 ;BTU/Cu.Ft. _____ cu ft m
d. Combustion air: CFM 10,000

16. a. Emission source is existing. _____ date installed _____
New x modified _____ Anticipated completion date _____
b. Does emission source have:
Certificate of Environmental Rating; No. x date _____ Rating _____
Application for Certificate of Operation; No. PA _____ date _____
Notice of Approval (work permit); date issued _____
Certificate of Operation; date issued _____

17. Harry H Power, P.E.
Signature of person preparing report

STATE OF NEW YORK : DEPARTMENT OF ENVIRONMENTAL CONSERVATION

----------X

In the Matter of compliance with Part 212 of Title 6 of the Codes, Rules and Regulations of the State of New York by:

MODIFIED ORDER ON CONSENT

J.R. Elkins Inc.
(Facility in Kings County)

File No.

Respondent.

----------X

On October 1, 1974, the Department issued an Order on Consent to J.R. Elkins Inc. requiring that certain steps be taken by Respondent to bring his facility into compliance with 6 NYCRR Part 212.

Subsequent to the issuance of the aforementioned Order, J.R. Elkins Inc. has requested that Schedule A of the Consent Order be modified. Copies of these requests are attached hereto and made a part hereof.

The modification to Schedule A is acceptable to the Department since it merely adjusts the schedule in light of delays not caused by the action of the Respondent.

Respondent has affirmatively waived its right to a hearing in the matter in the manner provided by law and has consented to the issuing and entering of this Order, with Revised Schedule A attached, pursuant to the provisions of Article 19 of the Environmental Conservation Law of the State of New York and agrees to be bound by the terms, provisions and conditions contained herein.

NOW, having considered this matter and being duly advised, I Order the following:

I. That the Schedule A, Revised Compliance Schedule for J.R. Elkins Inc. attached hereto be, and the same hereby is, substituted for the Compliance Schedule appended to the Department's Ocotber 1, 1974 Order on Consent.

II. All other terms and conditions of my October 1, 1974 Order on Consent not rescinded or modified by the within Revised Order on Consent, shall remain in full force and effect.

DATED:

Albany, New York

OGDEN REID, Commissioner
New York State Department of
Environmental Conservation

TO: Mr. J.R. Elkins, President
J.R. Elkins Inc.
518 Gardner Avenue
Brooklyn, N.Y. 11222

SCHEDULE A
(Revised 12/24/75)

ORDER ON CONSENT

J.R. ELKINS INC.

1. Respondent owns or operates facilities for secondary processing of aluminum scrap at the following locations:

518 Gardner Ave.
Brooklyn, N.Y. 11222

and

470 Scott Ave.
Brooklyn, N.Y. 11222

2. Respondent shall accomplish the following steps on or before the stated dates:

STEP ONE: Submit plans and applications to the New York City Department of Air Resources, 120 Wall Street, New York, N.Y. 10005, and submit evidence that equipment required to satisfy step two has been ordered, as follows:

A - "Bell" System for controlling emissions during chlorination -	Completed
B - Charging Well Hood System, Furnace #3, and existing air pollution control system to be used during non chlorination operation -	Completed
C - Additional Chip Dryer System -	Completed

STEP TWO: Start construction in accordance with approved plans, as follows:

A - "Bell" System for controlling emissions during chlorination -	Completed
B - Charging Well Hood System, Furnace #3, and existing air pollution control system to be used during non chlorination operation -	Dec. 31, 1976
C - Additional Chip Dryer System -	Completed

STEP THREE: Complete construction in accordance with approved plans, as follows:

A - "Bell" System for controlling emissions during chlorination - March 31, 1976

B - Charging Well Hood System, Furnace #3, and existing air pollution control system to be used during non chlorination operation - Aug. 31, 1976

C - Additional Chip Dryer System - April 30, 1976

STEP FOUR: Procure New York City Department of Air Resources Certificate to Operate, after having made timely and proper application therefore, and done all things requisite for the issuance thereof, as follows:

A - "Bell" System for controlling emissions during chlorination - May 31, 1976

B - Charging Well Hood System, Furnace #3, and existing air pollution control system to be used during non chlorination operation - Oct. 31, 1976

C - Additional Chip Dryer System - May 31, 1976

CONSENT BY RESPONDENT

Respondent acknowledges the authority and jurisdiction of the Commissioner of Environmental Conservation of the State of New York to issue the foregoing Order, waives public hearing or other proceedings in this matter, accepts the terms and conditions set forth in the Order, and consents to the issuance thereof.

J.R. ELKINS INC.

By_____

State of New York)
County of)ss:

On this day of , 197 , before me came to me known who being duly sworn deposed and said that he is the of the corporation described in and on whose behalf he executed the foregoing Consent and that he was fully authorized by said corporation so to do.

_____

120 WALL STREET, NEW YORK, N. Y. 10005

BUREAU OF ENGINEERING

Application No. PA- 1126/74

Date Issued 7/11/77

Expiration Date 7/11/80

P.E. or R.A.

Harry G. Savran, P.E.
186 Joralemon Street
Brooklyn, New York 11201

OWNER

J. R. Elkins, Inc.
518 Gardner Avenue
Brooklyn, New York 11222

Premises Address 518 Gardner Avenue Floor No. 1 Boro Bklyn

Premises Identification No. Source Emis. Pt. No. EMISSION SOURCE "1-CH.

CERTIFICATE OF OPERATION

DESCRIPTION OF INSTALLATION: Aluminum smelting. Operating 40 hr/wk.

DESCRIPTION OF EQUIPMENT: One (1) charging well, 16 1/2 ft. wide x 6 1/2 ft. deep x 4 1/2 ft. high, attached to No. 3 Reverberatory Furnace, 16 1/2 ft. x 17 1/2 ft. x 13 ft. high.

EXHAUST SYSTEM: One (1) Champion Blower & Forge Co. HPR blower, Size 385, 125 HP motor, 2500 RPM, exhausting 14000 CFM @ 150 F. and 30" S.P. (max.).

CONTROL APPARATUS: One (1) Purification Industries Series V Venturi Scrubber, with adjustable throat, with cyclonic separator, 5'6" diam x 13' 6" high, handling 26000 CFM of carbon and aluminum-laden gases @ 800 F, and discharging 14000 @ 150 F.

Any purported or attempted transfer of ... an operating certificate ... from one location to another or from one piece of equipment to another automatically revokes ... the certificate Sec. 5.31 New York City Air Pollution Control Code.

H.E. Anderson 7/11/77 HEA

DATE INSPECTED BY APC ENGINEER

HEAD, INDUSTRIAL PROCESSES DIVISION
FOR THE COMMISSIONER

INSTALLER

J.R. Elkins, Inc.
518 Gardner Avenue
Brooklyn, New York 11222

KEEP CERTIFICATE ON PREMISE NEAR EQUIPMENT. NOT VALID WITHOUT OFFICIAL SEAL.

Reproduced from best available copy.

120 WALL STREET, NEW YORK, N. Y. 10005

BUREAU OF ENGINEERING

DATE MAILED

AUG 11 1977

DEPT. OF AIR RESOURCES
PLAN DESK

Application No. PA-23/75

Date Issued 7/15/77

Expiration Date 7/15/80

P.E. or R.A.

Harry G. Savran, P.E.
186 Joralemon Street
Brooklyn, New York 11201

OWNER

J.R. Elkins, Inc.
518 Gardner Avenue
Brooklyn, New York 11222

Premises Address 518 Gardner Avenue Floor No. 1 Boro Bklyn

Premises Identification No.

Source Emis. Pt. No. EMISSION SOURCE "1-CH

CERTIFICATE OF OPERATION

DESCRIPTION OF INSTALLATION: Scrap aluminum smelting. Operated 40 hr/wk.

DESCRIPTION OF EQUIPMENT: Three (3) chlorination stations, each consistin of one (1) chlorinating lance and one (1) 3' x 5' x 3' high chlorination bell, each station located at the puddling wells on the ends of three (3) reverberatory furnaces, each 18' 6" x 23'6" x 9' 6" high.

EXHAUST SYSTEM: One (1) Natural Draft system induced by condensation of chlorine in gas-and-water injection mixer, gaseous chlorine removed from chlorination bell through 6" diam. cast iron pipe.

CONTROL DEVICE: One (1) gas-and-water injection mixer, 6" diam. x 3" diam. x 1'11" long, supplied by 6 GPM of 40 psi cold water, sprayed into gas stream through eight (8) 1/8" diam. holes, discharging into 3" diam. rubber hose discharging into ground disposal.

Any purported or attempted transfer of ... an operating certificate ... from one location to another or from one piece of equipment to another automatically revokes ... the certificate Sec. 5.31 New York City Air Pollution Control Code.

7/15/77 H.E. Anderson HEA

DATE INSPECTED BY APC ENGINEER

HEAD, INDUSTRIAL PROCESSES DIVISION
FOR THE COMMISSIONER

INSTALLER

J.R. Elkins, Inc.
518 Gardner Avenue
Brooklyn, N.Y. 11222

KEEP CERTIFICATE ON PREMISE NEAR EQUIPMENT. NOT VALID WITHOUT OFFICIAL SEAL.

A-100

Reproduced from best available copy.

City of New York

100 WALL STREET, NEW YORK, N. Y. 10005

BUREAU OF ENGINEERING

DATE MAILED

AUG 11 1977

DEPT. OF AIR RESOURCES
PLAN DESK

Application No. PA- 27/75

Date Issued 7/15/77

Expiration Date 7/15/80

P.E. or R.A.

Harry G. Savran, P.E.
186 Joralemon Street
Brooklyn, New York 11201

OWNER

J. R. Elkins, Inc.
518 Gardner Avenue
Brooklyn, New York 11222

Premises Address 470 Scott Avenue Floor No. 1 Boro Bklyn

Premises Identification No.

Source Emis. Pt. No. EMISSION SOURCE "3-CH

CERTIFICATE OF OPERATION

DESCRIPTION OF INSTALLATION: Scrap aluminum smelting. Operated 40 hr/wk

DESCRIPTION OF EQUIPMENT: Two (2) chlorination stations, each consisting of one (1) chlorinating lance and one (1) 3' x 5' x 3' high chlorination bell, each station located at the puddling wells on the ends of the two (2) reverberatory furnaces, each 18' 6" x 23' 6" x 9' 6" high.

EXHAUST SYSTEM: One (1) Natural Draft system induced by condensation of chlorine in gas-and-water injection mixer, gaseous chlorine removed from chlorination bell through 6" diam. cast iron pipe.

CONTROL DEVICE: One (1) gas-and -water injection mixer, 6" diam. x 3" di x 1'11" long, supplied by 6 GPM of 40 psi cold water, sprayed into gas stream through eight (8) 1/8" diam. holes, discharging into 3" diam. rubber hose discharging into ground disposal.

Any purported or attempted transfer of ... an operating certificate ... from one location to another or from one piece of equipment to another automatically revokes ... the certificate Sec. 5.31 New York City Air Pollution Control Code.

7/15/77 H.E. Anderson HEA

DATE INSPECTED BY APC ENGINEER

B. R. Ralph P.E.

HEAD, INDUSTRIAL PROCESSES DIVISION
FOR THE COMMISSIONER

INSTALLER

J.R. Elkins, Inc.
518 Gardner Avenue
Brooklyn, N.Y. 11222

KEEP CERTIFICATE ON PREMISE NEAR EQUIPMENT. NOT VALID WITHOUT OFFICIAL SEAL.

Reproduced from best available copy.

J. R. ELKINS, INC.
518 GARDNER AVENUE
BROOKLYN, N.Y. 11222

May 1, 1978

N.Y. State Dept. of Environmental Conservation
Region 2 Office
2 World Trade Center - 61st Floor
New York, N.Y. 10047

Att: Regional Air Pollution Control Engineer

Reference: (a) N.Y.S. Dept. of Environmental Conservation Order on Consent File No. 2085 dated Oct. 1, 1974

Gentlemen:

This letter is forwarded in accordance with the progress reporting requirements of the Reference (a) Consent Order and covers the period of January 15, 1978 through March 15, 1978.

CHIP DRYER SYSTEM: Operational testing of the system is in progress. At present we are developing operating and safety procedures. During testing, we encountered a problem conveying material through the dryer drum. An excessive build-up of product occurs at the feed end causing material to spill back into the stationary feed end housing. The dryer feed conveyor and the flights in the feed end of the drum are being modified. This work will be completed during the week of May 21, 1978. A request for inspection will be filed with the N. Y. City Dept. of Air Resources as soon as the modification is completed.

Very truly yours,

J. R. ELKINS, INC.

Joseph R. Elkins, President

JRE:cb
cc: Albert Klauss, P.E.

RECEIVED
REGION 2
MAY 9 - 1978

Reproduced from best available copy.

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

June 8, 1978

Mr. Alex Bailey
South Coat Air Quality
Management District
9150 Flare Drive
El Monte, California 91731

Dear Mr. Bailey:

TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. We would appreciate your cooperation in providing us with the information requested in Table 1 for each plant in your region. Additionally, information on the best controlled plants in your region would be appreciated.

As noted in the enclosed letter from Mr. Walter Barber of EPA, TRC has been designated by EPA as an authorized representative of the Agency. Therefore, TRC is subject to the provision of 42 U.S.C. 1857c9 (c) respecting confidentiality of methods or processed entitled to protection as trade secrets. If you believe that disclosure of any information requested would reveal trade secrets or other confidential information, you should clearly identify such information. If you wish, you may also set forth reasons for your claim and include supportive data or legal authority at the time the information is submitted (in most cases, there will be an opportunity to do so later if a question concerning public availability of information arises). If no such claim is made, the information may be released to the public without further notice to you.

Due to the relatively short time frame of this screening study, your prompt reply would be very much appreciated. Please let us know if you can meet a June 30, 1978 deadline. Thank you for your voluntary cooperation in this study.

Sincerely,

TRC - THE RESEARCH CORPORATION
of New England

Edward T. Brookman

Edward T. Brookman
Associate Project Engineer

ETB/daa

Attachments

Service tailored to the client's need - backed by research

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

DESIGNATION OF AUTHORIZED REPRESENTATIVE

The Research Corporation of New England (TRC), is hereby designated an Authorized Representative of the Administrator of the U. S. Environmental Protection Agency for purposes of (i) assisting in the development of any implementation plan under 42 USC 1857c-5, or 42 USC 1856-c(d), any standard of performance under 42 USC 1856c-6, or any emission standard under 42 USC 1857c-7, (ii) determining whether any person is in violation of any such standard or any requirement of such a plan, or (iii) carrying out 42 USC 1857h-1.

This designation is made pursuant to the Clean Air Act, 42 USC 1857c-9. The United States Code provides that, upon presentation of this credential, the Authorized Representative named herein: (A) shall have a right of entry to, upon, or through any premises in which an emission source is located or in which records required to be maintained under 42 USC 1857c-9(a)(1) are located, and (B) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under 42 USC 1857c-9(a)(1), and sample any emissions which the owner or operator of such source is required to sample.

Authorized Representatives of the Administrator are subject to the provisions of 42 USC 1857c-9(c) respecting confidentiality of methods or processes entitled to protection as trade secrets.

Date: 5-30-78

Designation Expires: September 30, 1978

for Walter C. Barber
Deputy Assistant Administrator for Air Quality
Planning and Standards

TABLE I

INFORMATION NEEDED FOR THE EPA SCREENING STUDY OF THE SECONDARY ALUMINUM MANUFACTURING INDUSTRY

1. What is the secondary aluminum production capacity of the plant?
2. What is the number of plant employees involved in the secondary aluminum manufacturing operations?
3. What is the age of the manufacturing facility?
4. Provide a quantitative estimate of past, current and projected production at the plant projected for five years.
5. Indicate any plans for expansion or modification of the production facilities.
6. Provide a brief description of the process employed for secondary aluminum manufacture at the plant, together with flow sheets and a material balance. Pollutant emission locations should be clearly shown.
7. Provide a description and discussion of the emission control systems used in the manufacturing operation. Design and actual removal efficiencies should be specified.
8. Provide a current emissions inventory for the secondary aluminum manufacturing operation at the plant. Separate emissions data should be supplied for each basic step in the manufacturing process and for each emission point. If emissions factors have been developed for the operation, such information should be supplied.

   Specifically, the following format should be used for supplying the emissions data:

Process	Volumetric Flow Rate (temp)	Pollutants	Quantities Generated	Quantities Emitted	% Control

9. Provide any available emission test data from the secondary aluminum manufacturing operations and indicate the availability of such data which is not in your possession. Test methods should be specific and uncontrolled emission data should, if possible, be reduced to the form of emission factors.

South Coast
AIR QUALITY MANAGEMENT DISTRICT
METROPOLITAN ZONE
9150 FLAIR DRIVE, EL MONTE, CALIFORNIA 91731 • (213) 572-6258

RECEIVED
JUL 3 - 1978
RC-THE RESEARCH CORP. OF NEW ENGLAND

June 27, 1978

The Research Corporation of New England
125 Silas Deane Highway
Wethersfield, Connecticut 06109

Attention: Mr. Edward T. Brookman
Associate Project Engineer

Gentlemen:

We would like to provide you with the information you requested in your letter of June 8, 1978, but due to a shortage of manpower, we are unable to assign engineering time to compile the data requested by you. However, if you wish to send someone from your office to research our files and extract the data you need, we would be happy to provide limited assistance.

Very truly yours,

Robert J. MacKnight
Director of Engineering

Alex L. Bailey
Alex L. Bailey
Supervising A. P. Engineer II
Engineering Division

ALB:sh

TRC THE RESEARCH CORPORATION of New England
125 SILAS DEANE HIGHWAY, WETHERSFIELD, CONNECTICUT 06109 203 563-1431
Environmental Consultants To Management

July 12, 1978

Mr. R. M. Cooperman
Suite 504
900 17th Street NW
Washington, D.C. 20006

Dear Mr. Cooperman:

I am sending this letter in response to the request you made during our telephone conversation yesterday. TRC - THE RESEARCH CORPORATION of New England is currently performing a screening study of the secondary aluminum manufacturing industry for the Environmental Protection Agency (EPA). This study is being performed under EPA Contract Number 68-02-2615 between TRC and the Emission Standards and Engineering Division of EPA's Office of Air Quality Planning and Standards. Background data on the industry is being gathered to help determine the need for development of standards of performance pursuant to Section III of the Clean Air Act. Any help you can give to us on this project would be greatly appreciated. Thank you for your cooperation.

Sincerely,

TRC - THE RESEARCH CORPORATION
of New England

Edward T. Brookman

Edward T. Brookman
Associate Project Engineer

ETB/daa

ALLIED METALS

System Operational
April 1977

AUG 1973 TEST

Test No.		Flow SCFM	Front Half Particulate GR/DSCF	Front Half Particulate LB/HR	Flourides (Gaseous) PPMV	Flourides (Gaseous) LB/HR
1	South Vent	31400	0.050	12.86	180	17.0
	North Vent	26600	0.045	9.77	86	7.3
	Total	58000		22.63		25.2
2	South Vent	31900	0.126	33.02	595	60.3
	North Vent	26400	0.079	17.20	180	15.1
	Total	58300		50.22		75.4
3	South Vent	32400	0.020	5.28	44	4.5
	North Vent	26500	0.026	5.64	35	2.9
	Total	58900		10.92		7.4

SEPT 1977 TEST
Teller System

Charging	Charge Rate Lb/Hr				Florides Lb/Hr Total	Florides Lb/Hr Gas	PPMV Gas
1	4150	41600	0.00008	0.03			
2	9500	41900	0.0002	0.07			
4	2000	41800	0.0003	0.10			
7	3400	40800	0.0004	0.14			
10		41200	0.0003	0.11			
Demag							
3		41800	0.0001	0.04	0.28	0.15	1.1
5		41600	0.0013	0.46	0.16	0.09	0.7
6		42500	0.0015	0.56	0.12	0.04	0.3
8		41500	0.0005	0.17	0.12	0.05	0.4
9		41600	0.0007	0.24	0.12	0.17	0.5

TESI DRY SYSTEMS

A. DATA SUMMARY - COMMERCIAL INSTALLATIONS - TESISORB ADDITIVES

APPLICATION:	GLASS CONTAINER	GLASS FIBERGLASS	SECONDARY ALUMINUM
System capacity - SCFM/°F	17-19,000 SCFM @ 600°F	3,500 SCFM @ 800°F	40-90,000 SCFM @ 300°F
Inlet Conditions:			
HF	N/A	70-200	2-20
B	N/A	.03 gr/scf	N/A
SO_x	50-200 PPM	50-300 PPM	(0-100 PPM Cl^-)
Particulate (size)	.2-.4 gr/sdcf (.1-1.0μ)	.1-.2 sdcf (.05-1.0μ)	.01-.25 gr/sdcf (.2-1.5μ)
Opacity	20%	20%	20-80%
Outlet Performance:			
HF	N/A	<1 PPM	<1 PPM
B	N/A	.001-.0016 gr/scf	
SO_x	5-10 PPM	25 PPM	(<5 PPM Cl^-)
Particulate	.001-.01 gr/sdcf	.001-.007 gr/sdcf	.001-.003 gr/sdcf
Opacity	Zero	Zero	<5%
Shake Cycle	24-36 hrs.	24 hrs.	72-120 hrs.
System Pressure Drop	8-10 in. w.g.	8-12 in. w.g.	3-15 in. w.g.

3/16/75

Teller Environmental Systems, Inc.
10 Faraday Street
Worcester, Massachusetts 01605
Tel. No. 617 755-8613

E. DATA SUMMARY - COMMERCIAL INSTALLATION - ROCHESTER SMELTING & REFINING

DATA OBTAINED BY EPA

DATE	OPERATION MODE	SCFM IN	SCFM OUT	ΔP in. w.g.	PARTICULATE gr/scf IN	PARTICULATE gr/scf OUT	FLUORIDE PPM IN	FLUORIDE PPM OUT
10/22/74	P-H	44600	52200	10.0	0.014		0.43	
10/23/74	C-C-P	49900	56800	13.0	0.0128	0.0038	2.42	0.43
10/23/74	P-C-F	46800	61000	13.8	0.0234	0.0084	3.1	0.86
10/24/74	C-C-C	40900	50100	4.8	0.0254	0.0032	4.04	1.35
10/24/74	P-C-H	36700	47700	5.6	0.0086	0.0023	0.54	0.27
10/25/74	C-C-P	33900	45400	10.4	0.0196	0.0036	4.32	0.81
3/18/75	C-C-P	32600	36100		0.0616	0.0021	0.97	0.43
3/18/75	P-C-P	29400	34100	7.7	0.0369	0.0006	1.19	0.27
3/19/75	C-P-C	24400	28400	12.2	0.0540	0.0016	1.16	1.17
3/20/75	C-P-F	33900	38700	2.6	0.0661	0.0010	10.2	0.98
3/20/75	C-C	37400	41600	3.9	0.0256	0.0010	0.91	0.38
3/25/75	C-C	43600	40500	4.3	0.0162	0.0019	2.24	0.07
3/25/75	P-P	37300	41800	4.8	0.0018	0.0012	0.25	0.05
3/26/75	C-C	45900	45500	11.9	0.0938	0.0023	1.24	0.21
3/27/75	C-C	33800	37400	12.1	0.0494	0.0034	1.21	0.07
3/27/75	C-C	32400	36200	12.5	0.0357	0.0014	0.49	0.05

H=Hold
C=Charge
P=Pour

Average:
0.0341 0.0025
or 93% Removed

Meeting Reports

The following section contains the results of the meetings with the outside consultant on this project: Mr. William Balgord, President, Environmental & Resources Technology, Inc.

Report on Meeting with Bill Balgord May 19, 1978

Date: May 19, 1978
Place: TRC - Wethersfield, CT
Attendees: Bill Balgord and Ed Brookman

Summary of Discussion:

During the meeting with Bill, several topics were discussed regarding the secondary aluminum industry. These topics included possible best controlled plants, possible trade association contacts, possible future industrial trends, process descriptions, and demagging operations.

I provided him with a copy of the Project Plan and Task Order.

Report on Meeting with Bill Balgord May 30, 1978

Date: May 30, 1978
Place: TRC - Wethersfield, CT
Attendees: Bill Balgord and Ed Brookman

Summary of Discussion:

Bill provided several documents for use in this project. These documents were discussed as regards their relevance and content.

Bill also provided information on industry and trade association personnel who might be contacted for further discussion on the secondary aluminum industry.

CDS Results

The following section of Appendix A contains the result of a search conducted through the Compliance Data System (CDS) file on SIC 3341 which is the nonferrous secondary metals industry. As can be seen, very few of the secondary aluminum plants are listed in CDS. This is primarily due to either their predicted emissions being less than the inclusion limit of CDS (90,720 kg/year (100 tons/year)) or there were no complaints and subsequent plant inspections. Those that are listed include very little emission information.

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 3

BERMAN BROS IRON&MET SECONDARY ALUMINUM SCREENING STUDY

STATE AL COUNTY JEFFERSON

COUNTY 1980 SOURCE 08020 AQCR 004 CITY 0380

FEDF NON-FED RDE1

APCD 0 SIP SOURCE RDE2 8

APST OPERATING RDE3 M

SOURCE NAME BERMAN BROS IRON&MET

ADDRESS 2700 16TH STREET N

CITY, STATE BIRMINGHAM AL 35207

STATE REGIST

NEDB XREF 8020

PRIORITY

SIC 3341

RDE4

RDE5

RDE6

STAFF MEMBER

LAST-UPDATE 2/23/78

POINT NUMBER 000 MULT

POLLUTANT

DESCRIPTION ENTIRE SOURCE

SOURCE CMPL 4 IN COMPL-CERTIFICATN

SOURCE-SIP 0 NO SCHEDULE

CAPACITY

STATE/LOC REGUL

SOURCE EMIS CAT 2 100 TO 1000 TPY

SCC8 CODE

CM82

RDE7

SOURCE DATA REPORT

```
06/02/78                                  COMPLIANCE DATA SYSTEM                                                  PAGE     18
US REDUCTION CO                     SECONDARY ALUMINUM SCREENING STUDY                                  FEDF   NON-FED        RDE1
STATE  AL     COUNTY FRANKLIN                                                                           APCD 0 SIP SOURCE     RDE2 0
COUNTY 1460   SOURCE 00001  AGCR 007  CITY 2940                                                         APST   OPERATING      RDE3 M
SOURCE NAME    US REDUCTION CO          STATE REGIST                    SIC  3341                  RDE6
ADDRESS              PO BX 1149         NEDS XREF      0001             RDE4                       STAFF MEMBER  A69 DUBOSE
CITY, STATE    RUSSELLVILLE AL 35653    PRIORITY                        RDE5                       LAST-UPDATE    2/23/78

COMMENT 1SECONDARY SMELTING AND
        2REFINING - ALUMINUM
POINT NUMBER  000      MULT             SOURCE CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT                               SOURCE-SIP   2 APPROVED STATE SCHED    SOURCE EMIS CAT 2 100 TO 1000 TPY        RDE7
DESCRIPTION    ENTIRE SOURCE            CAPACITY                               SCC8 CODE
POINT NUMBER  001      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                   CMS2
POLLUTANT      PT                       POINT-SIP    2 APPROVED STATE SCHED    PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    CRUSHING/SCREENING       CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT W001, Z006
POINT NUMBER  002      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                   CMS2
POLLUTANT      PT                       POINT-SIP    2 APPROVED STATE SCHED    PT EMIS CAT     3 OVER 1000 TPY          RDE7
DESCRIPTION    TANDEM REVERB FURNACE    CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT W002
POINT NUMBER  003      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                   CMS2
POLLUTANT      PT                       POINT-SIP    7 SCHED PEND/NOT APPRV    PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    INDUCTION FURN #1        CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT W003
POINT NUMBER  005      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT      PT                       POINT-SIP    7 SCHED PEND/NOT APPRV    PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    INDUCTION FURN #3        CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT W005
POINT NUMBER  006      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT      PT                       POINT-SIP    0 NO SCHEDULE             PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    INDUCTION FURN #2        CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT W004
POINT NUMBER  007      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT      PT                       POINT-SIP    0 NO SCHEDULE             PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    DRYING/CLASS - FLUSSOL   CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT Z007
POINT NUMBER  008      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT      PT                       POINT-SIP    0 NO SCHEDULE             PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    ROTARY FURNACE           CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT Z008
POINT NUMBER  009      MULT             POINT CMPL   4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT      PT                       POINT-SIP    0 NO SCHEDULE             PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION    REVERB FURNACE           CAPACITY                               SCC8 CODE       304001
               COMMENT 1       PERMIT Z009
```

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 20

W J BULLOCK INC SECONDARY ALUMINUM SCREENING STUDY

STATE AL COUNTY JEFFERSON FEDF NON-FED RDE1

COUNTY 1980 SOURCE 00068 AQCR 004 CITY 0380 APCD 0 SIP SOURCE RDE2 0

APST OPERATING RDE3 M

SOURCE NAME W J BULLOCK INC STATE REGIST 4-07-0068-21 SIC 3341 RDE4

ADDRESS 1501 ERIE ST NEDB XREF RDE5 STAFF MEMBER A69 DUBOSE

CITY, STATE BIRMINGHAM AL 35224 PRIORITY LAST-UPDATE 2/23/78

COMMENT 1SECONDARY NONFERROUS METALS

POINT NUMBER 000 MULT SOURCE CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CM82

POLLUTANT SOURCE-SIP 2 APPROVED STATE SCHED SOURCE EMIS CAT 2 100 TO 1000 TPY RDE7

DESCRIPTION ENTIRE SOURCE CAPACITY SCCS CODE

ACTION 01 SCHD 4/ 3/75 ACHV 4/ 3/75 ACT-TYPE A5 RE-INSPECTION

STAFF A69 DUBOSE RESULTS 01 ACTION ACHIEVED RDE8 0

ACTION 02 SCHD 12/17/75 ACHV 12/17/75 ACT-TYPE A8 NOTICE OF VIOLATION

STAFF A69 DUBOSE RESULTS 01 ACTION ACHIEVED RDE8 0

POINT NUMBER 001 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 2 APPROVED STATE SCHED PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION BRASS REVERBERATORY FURN1 CAPACITY SCCS CODE 304002

POINT NUMBER 002 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 2 APPROVED STATE SCHED PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION BRASS ROTARY FURNACE CAPACITY SCCS CODE 304002

POINT NUMBER 003 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 2 APPROVED STATE SCHED PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION RADIATOR SWEATER CAPACITY SCCS CODE 304002

POINT NUMBER 004 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 2 APPROVED STATE SCHED PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION BORINGS DRYER CAPACITY SCCS CODE 304002

POINT NUMBER 005 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 2 APPROVED STATE SCHED PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION ALUMINUM SWEAT FURNACE CAPACITY SCCS CODE 304001

POINT NUMBER 006 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 7 SCHED PEND/NOT APPRV PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION ALUMINUM SWEAT FURNACE1 CAPACITY SCCS CODE 304001

POINT NUMBER 007 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 7 SCHED PEND/NOT APPRV PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION SWEAT FURNACE,MELT 1&2 CAPACITY SCCS CODE 304008

POINT NUMBER 008 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 7 SCHED PEND/NOT APPRV PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION ZINC DISTILLATION FURN CAPACITY SCCS CODE 304008

POINT NUMBER 009 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CH 4.4 CM82

POLLUTANT PT POINT-SIP 7 SCHED PEND/NOT APPRV PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION ZINC DISTILLATION FURN2 CAPACITY SCCS CODE 304008

SOURCE DATA REPORT

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06/02/78                                  COMPLIANCE DATA SYSTEM                                                    PAGE     21
W J BULLOCK INC                     SECONDARY ALUMINUM SCREENING STUDY                                  FEDF   NON-FED        RDE1
STATE  AL     COUNTY JEFFERSON                                                                          APCD 0 SIP SOURCE     RDE2 0
COUNTY 1980   SOURCE 00068  AQCR 004  CITY 0380                                                         APST   OPERATING      RDE3 M
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POINT NUMBER  010      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN3      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  011      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN4      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  012      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN5      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  013      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN6      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  014      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN7      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  015      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN8      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  016      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DISTILLATION FURN9      CAPACITY                              SCC8 CODE       304008
POINT NUMBER  017      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL CH 4.4                  CMS2
POLLUTANT     PT                           POINT-SIP   7 SCHED PEND/NOT APPRV    PT EMIS CAT     0 UNKNOWN               RDE7
DESCRIPTION   ZINC DIST, FURN#10           CAPACITY                              SCC8 CODE       304008
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SOURCE DATA REPORT

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VULCAN MATERIALS CO. SECONDARY ALUMINUM SCREENING STUDY

STATE CA COUNTY RIVERSIDE

COUNTY 6420 SOURCE 00014 AQCR 024 CITY 1680

FEDF NON-FED RDE1 1
APCD 0 SIP SOURCE RDE2
APST OPERATING RDE3

SOURCE NAME VULCAN MATERIALS CO. STATE REGIST SIC 3341 RDE6
ADDRESS QUARRY ROAD NEDS XREF 0043 RDE4 STAFF MEMBER C04 GREEN
CITY, STATE CORONA CA 91720 PRIORITY RDE5 LAST-UPDATE 5/17/78

POINT NUMBER 000 MULT SOURCE CMPL 2 IN COMPL-SOURCE TEST STATE/LOC REGUL CM82
POLLUTANT SOURCE-SIP 0 NO SCHEDULE SOURCE EMIS CAT 2 100 TO 1000 TPY RDE7
DESCRIPTION ENTIRE SOURCE CAPACITY SCCS CODE

ACTION 06	SCHD 2/18/75	ACHV 2/18/75	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF C04 GREEN	RESULTS	01 ACTION ACHIEVED	RDE8	0
ACTION 07	SCHD 5/29/75	ACHV 5/29/75	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF C04 GREEN	RESULTS	01 ACTION ACHIEVED	RDE8	0
ACTION 08	SCHD 12/12/75	ACHV 9/25/75	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF C04 GREEN	RESULTS	00	RDE8	0
ACTION 09	SCHD 12/23/75	ACHV 12/23/75	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF C04 GREEN	RESULTS	00	RDE8	0
ACTION 10	SCHD 3/25/76	ACHV 3/25/76	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF	RESULTS		RDE8	
ACTION 11	SCHD 6/24/76	ACHV 6/24/76	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF	RESULTS		RDE8	
ACTION 12	SCHD 8/26/76	ACHV 8/26/76	ACT-TYPE 77	STATE SOURCE TEST STAFF	RESULTS	01 ACTION ACHIEVED	RDE8	
ACTION 13	SCHD 12/ 2/76	ACHV 12/ 2/76	ACT-TYPE 77	STATE SOURCE TEST STAFF	RESULTS	01 ACTION ACHIEVED	RDE8	
ACTION 14	SCHD 1/26/77	ACHV 1/26/77	ACT-TYPE 77	STATE SOURCE TEST STAFF	RESULTS	01 ACTION ACHIEVED	RDE8	
ACTION 15	SCHD 6/29/77	ACHV 6/29/77	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF	RESULTS	01 ACTION ACHIEVED	RDE8	
ACTION 16	SCHD 9/30/77	ACHV 9/30/77	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF	RESULTS	01 ACTION ACHIEVED	RDE8	
ACTION 17	SCHD 11/30/77	ACHV 11/30/77	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF	RESULTS		RDE8	
ACTION 18	SCHD 2/28/78	ACHV 2/28/78	ACT-TYPE 78	STATE VISIBLE EMISSIONS EVALUATION STAFF	RESULTS		RDE8	

POINT NUMBER 001 MULT POINT CMPL 3 IN COMPL-INSPECTION STATE/LOC REGUL CM82
POLLUTANT POINT-SIP 0 NO SCHEDULE PT EMIS CAT 2 100 TO 1000 TPY RDE7
DESCRIPTION ALUMINUM DROSS MILL CAPACITY SCCS CODE RDE8 25

SOURCE DATA REPORT

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06/02/78                                  COMPLIANCE DATA SYSTEM                                                    PAGE      1
N. AMERICAN SMELTING                  SECONDARY ALUMINUM SCREENING STUDY                                  FEDF    NON-FED        RDE1 1
STATE  DE     COUNTY NEW CASTLE                                                                          APCD 0 SIP SOURCE     RDE2
COUNTY 0180   SOURCE 00064  AQCR 045  CITY 0260                                                          APST    OPERATING     RDE3 2

SOURCE NAME    N. AMERICAN SMELTING      STATE REGIST                    SIC  3341                RDE6
ADDRESS                                  NEDS XREF      0064             RDE4                     STAFF MEMBER
CITY, STATE    WILMINGTON DE 19899       PRIORITY                        RDE5                     LAST-UPDATE   12/22/77

POINT NUMBER  000      MULT              SOURCE CMPL 4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT                                SOURCE-SIP  0 NO SCHEDULE             SOURCE EMIS CAT 3 OVER 1000 TPY          RDE7
DESCRIPTION    SECONDARY SMELTING        CAPACITY                              SCC8 CODE

     ACTION 01 SCHD  6/30/75  ACHV  5/ 9/75  ACT-TYPE 50   EPA INSPECTION
                                                            STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0
     ACTION 02 SCHD  6/30/76  ACHV   / /     ACT-TYPE 08   STATE INSPECTION
                                                            STAFF                          RESULTS  00                  RDE8  0
     ACTION 03 SCHD  9/30/77  ACHV  2/10/77  ACT-TYPE 08   STATE INSPECTION
                                                            STAFF                          RESULTS  30 IN COMPLIANCE    RDE8
     ACTION 04 SCHD  4/10/77  ACHV  2/10/77  ACT-TYPE 50   EPA INSPECTION
                                                            STAFF   E02 FERDAS             RESULTS  01 ACTION ACHIEVED  RDE8 72
     ACTION 06 SCHD 12/31/76  ACHV 12/31/76  ACT-TYPE 10   STATE CIVIL ACTION
                                                            STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 07 SCHD 12/31/76  ACHV 12/31/76  ACT-TYPE 09   STATE VE EVALUATION
                                                            STAFF                          RESULTS  10 OUT OF COMPLIAN  RDE8
     ACTION 08 SCHD  3/31/77  ACHV   / /     ACT-TYPE 53   PRELIMINARY ENGINEERING REVIEW
                                                            STAFF   E04 WATMAN             RESULTS  02 NOT ACHIEVED     RDE8
     ACTION 09 SCHD  9/30/78  ACHV   / /     ACT-TYPE 08   STATE INSPECTION
                                                            STAFF                          RESULTS                      RDE8

POINT NUMBER  010      MULT              POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL V                        CMS2
POLLUTANT      PT                        POINT-SIP   0 NO SCHEDULE             PT EMIS CAT     3 OVER 1000 TPY          RDE7
DESCRIPTION    SCRAP ALUM TO INGOT       CAPACITY                              SCC8 CODE       304001
               COMMENT 1      WET SCRUBBER-HIGH EFFICIENTCY

     ACTION 05 SCHD  1/ 1/72  ACHV  1/ 1/72  ACT-TYPE 05   FINAL COMPLIANCE
                                                            STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0

POINT NUMBER  015      MULT 010          POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL XV                       CMS2
POLLUTANT      VE                        POINT-SIP   0 NO SCHEDULE             PT EMIS CAT     3 OVER 1000 TPY          RDE7
DESCRIPTION    SCRAP ALUM TO INGOT       CAPACITY                              SCC8 CODE       304001
               COMMENT 1      WET SCRUBBER-HIGH EFFICIENTCY

     ACTION 05 SCHD  1/ 7/72  ACHV  1/ 7/72  ACT-TYPE 05   FINAL COMPLIANCE
                                                            STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0

POINT NUMBER  020      MULT              POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL V                        CMS2
POLLUTANT      PT                        POINT-SIP   0 NO SCHEDULE             PT EMIS CAT     3 OVER 1000 TPY          RDE7
DESCRIPTION    ROTARY FNC                CAPACITY                              SCC8 CODE       304002
               COMMENT 1      FABRIC FILTER-MEDIUM TEMPERATURE

     ACTION 05 SCHD  1/ 1/72  ACHV  1/ 1/72  ACT-TYPE 05   FINAL COMPLIANCE
                                                            STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0

POINT NUMBER  025      MULT 020          POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL XV                       CMS2
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SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 2

N. AMERICAN SMELTING SECONDARY ALUMINUM SCREENING STUDY

STATE DE COUNTY NEW CASTLE FEDF NON-FED RDE1 1

COUNTY 0180 SOURCE 00064 AQCR 045 CITY 0260 APCD 0 SIP SOURCE RDE2

APST OPERATING RDE3 2

POLLUTANT VE POINT-SIP 0 NO SCHEDULE PT EMIS CAT 3 OVER 1000 TPY RDE7

DESCRIPTION ROTARY PNC CAPACITY SCCS CODE 304002

COMMENT 1 FABRIC FILTER-MEDIUM TEMPERATURE

ACTION 05 SCHD 1/ 7/72 ACHV 1/ 7/72 ACT-TYPE 05 FINAL COMPLIANCE

STAFF RESULTS 01 ACTION ACHIEVED RDE8 0

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 1

KEYSTONE GA METAL CO SECONDARY ALUMINUM SCREENING STUDY

STATE GA COUNTY GREENE

COUNTY 2440 SOURCE 00008 AQCR 057 CITY 2460

FEDF NON-FED RDE1

APCD 0 SIP SOURCE RDE2

APST OPERATING RDE3

SOURCE NAME KEYSTONE GA METAL CO STATE REGIST SIC 3341 RDE6

ADDRESS BOX 100 NEDS XREF 0008 RDE4 STAFF MEMBER

CITY, STATE GREENSBORO GA 30642 PRIORITY RDE5 LAST-UPDATE 4/ 6/76

POINT NUMBER 000 MULT SOURCE CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL CMB2

POLLUTANT PT SOURCE-SIP 2 APPROVED STATE SCHED SOURCE EMIS CAT 1 LESS THAN 100 TPY RDE7

DESCRIPTION ENTIRE SOURCE CAPACITY SCC8 CODE

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 12

R LAVIN & SONS SECONDARY ALUMINUM SCREENING STUDY

STATE IL COUNTY COOK

COUNTY 1540 SOURCE 00510 AQCR 067 CITY 1220

FEDF NON-FED RDE1 1

APCD 0 SIP SOURCE RDE2

APST OPERATING RDE3

SOURCE NAME	R LAVIN & SONS	STATE REGIST	031600AOX	SIC	3341	RDE6	
ADDRESS	3426 S KEDZIE	NEDS XREF	9999	RDE4		STAFF MEMBER	
CITY, STATE	CHICAGO IL 60623	PRIORITY		RDE5		LAST-UPDATE	10/11/76

POINT NUMBER	000 MULT	SOURCE CMPL & IN COMPL-CERTIFICATN		STATE/LOC REGUL			CP82
POLLUTANT		SOURCE-SIP	NOT SPECIFIED	SOURCE EMIS CAT 2 100 TO 1000 TPY			RDE7
DESCRIPTION	ENTIRE SOURCE	CAPACITY		SCCS CODE			

SOURCE DATA REPORT

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06/02/78                                  COMPLIANCE DATA SYSTEM                                                  PAGE      4
WABASH SMELTING                      SECONDARY ALUMINUM SCREENING STUDY                                  FEDF   NON-FED        RDE1
STATE  IN     COUNTY WABASH                                                                            APCD 1 SIP - ACTIVE   RDE2
COUNTY 4320  SOURCE 00010  AQCR 084  CITY 4300                                                          APST   OPERATING      RDE3
SOURCE NAME    WABASH SMELTING          STATE REGIST  0010          SIC  3341                  RDE6
ADDRESS        US 24W                   NEDS XREF     0010          RDE4                       STAFF MEMBER
CITY, STATE    WABASH IN 46992          PRIORITY                    RDE5                       LAST-UPDATE    4/27/78

COMMENT 2FOLLOWING REQUIRED OF SOURCE IN GENERAL
        36/30/73-SUBMIT LIST OF POSITIONS AS FOLLOWS
        4/ POSITION/SHIFT RESPONSIBLE FOR OPEATION OF REVERBERA-
        5TORY PROCESS CNTRL EQUIP AND SCRUBBER
        6/ POSITION/SHIFT RESPONSIBLE FOR MAINTENANCE OF ABOVE
        7EQUIPMENT 7/1/73-SUBMIT MONTHLY PRO-
        8GRESS REPORTS BEGINNING ON THIS DATE.

POINT NUMBER  000      MULT                SOURCE CMPL 4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                          CMS2
POLLUTANT                                  SOURCE-SIP  5 8113 ORDER-EPA ENFOR    SOURCE EMIS CAT 2 100 TO 1000 TPY        RDE7
DESCRIPTION   ENTIRE SOURCE                CAPACITY                              SCC8 CODE

     ACTION 01 SCHD  6/27/74  ACHV   / /    ACT-TYPE 55   NOTICE OF VIOLATION
                                                          STAFF                      RESULTS  00                    RDE8 10
     ACTION 03 SCHD  5/31/73  ACHV  5/31/73  ACT-TYPE 64   EPA ORDER ISSUED
                                                          STAFF                      RESULTS  01 ACTION ACHIEVED    RDE8  0
     ACTION 04 SCHD  3/28/73  ACHV  3/28/73  ACT-TYPE 63   NOTICE OF VIOLATION ISSUED
                                                          STAFF                      RESULTS  01 ACTION ACHIEVED    RDE8  0
     ACTION 05 SCHD  6/27/74  ACHV  6/27/74  ACT-TYPE 63   NOTICE OF VIOLATION ISSUED
                                                          STAFF                      RESULTS  01 ACTION ACHIEVED    RDE8  0
     ACTION 06 SCHD  7/16/75  ACHV  6/16/75  ACT-TYPE 72   CONSENT DECREE ISSUED
                                                          STAFF                      RESULTS  00                    RDE8  0
     ACTION 07 SCHD 10/17/74  ACHV 10/17/74  ACT-TYPE 77   REFERRAL TO US ATTORNEY
                                                          STAFF                      RESULTS                        RDE8
     ACTION 08 SCHD   / /    ACHV 10/25/72  ACT-TYPE 97   COURT ORDER
                                                          STAFF   K01                RESULTS                        RDE8
     ACTION 09 SCHD  6/30/77  ACHV   / /    ACT-TYPE 81   COMPLIANCE MONITORING EVALUATION
                                                          STAFF                      RESULTS                        RDE8

POINT NUMBER  001      MULT                POINT CMPL  1 NOT IN COMPL-NO SCHD    STATE/LOC REGUL APC-3,APC-5              CMS2
POLLUTANT     PT                           POINT-SIP   5 8113 ORDER-EPA ENFOR    PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION   REV FURN AREA-NOT DEMAG      CAPACITY                              SCC8 CODE       304001
              COMMENT 1      CONTRL EMIS FROM CHRGNGWELL HOODNG SYS-FURN 5,14
                      2      REPORT ON OPERATION OF FURNACES 14 AND 5 BY 7/15/73. IF
                      3      COMPLIANCE NOT MET MODIFY IN ACCORDANCE WITH SCHEDULE FOR
                      4      EMISSION PT 002.

POINT NUMBER  002      MULT 001            POINT CMPL  1 NOT IN COMPL-NO SCHD    STATE/LOC REGUL APC-3,APC-5              CMS2
POLLUTANT     PT                           POINT-SIP   5 8113 ORDER-EPA ENFOR    PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION   REV FURN AREA-NOT DEMAG      CAPACITY                              SCC8 CODE       304001
              COMMENT 1      CNTRL EMIS FR CHGNG WELL HDNG SYS-FR 1,2,6-12

POINT NUMBER  003      MULT                POINT CMPL  1 NOT IN COMPL-NO SCHD    STATE/LOC REGUL APC-3,APC-5              CMS2
POLLUTANT     PT                           POINT-SIP   5 8113 ORDER-EPA ENFOR    PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION   DEMAGGING-RV FURN,SCRB ST    CAPACITY                              SCC8 CODE       304001
              COMMENT 1      MODIFY OPERATING PROCEDURE FOR COMPLIANCE
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                                                  SOURCE DATA REPORT
*****************************************************************************************************************
 06/02/78                                      COMPLIANCE DATA SYSTEM                                  PAGE      5
 WABASH SMELTING                      SECONDARY ALUMINUM SCREENING STUDY                        FEDF   NON-FED       RDE1
 STATE  IN    COUNTY WABASH                                                                     APCD 1 SIP - ACTIVE  RDE2
 COUNTY 4320  SOURCE 00010  AQCR 084  CITY 4300                                                 APST   OPERATING     RDE3
*****************************************************************************************************************
                        2      IF UNABLE TO COMPLY BY 6/30/73 FOLLOWING SCHEDULE IN EFFECT
                        3      FINAL PLAN-07/31/73 AWARD CONTRACTS- 08/15/73
                        4      START CONSTRUCTION-10/15/73 COMPLETE CONSTR-05/31/74
                        5      FINAL COMPLIANCE 06/01/74
*****************************************************************************************************************
   POINT NUMBER  900     MULT                POINT CMPL  5 IN COMPL W SCHEDULE     STATE/LOC REGUL APC-5                CMS2
   POLLUTANT     PT                          POINT-SIP     NOT SPECIFIED           PT EMIS CAT     0 UNKNOWN            RDE7
   DESCRIPTION   CHIP DRYERS #1,2,3          CAPACITY                              SCC8 CODE

        ACTION 01 SCHD  8/31/75  ACHV  8/31/75  ACT-TYPE 05   FINAL COMPLIANCE
                                                              STAFF                          RESULTS  00                RDE8  0
*****************************************************************************************************************
   POINT NUMBER  901     MULT                POINT CMPL  5 IN COMPL W SCHEDULE     STATE/LOC REGUL APC-5                CMS2
   POLLUTANT     PT                          POINT-SIP     NOT SPECIFIED           PT EMIS CAT     0 UNKNOWN            RDE7
   DESCRIPTION   FNC1,2,5,6,7,8,9,10,11,14   CAPACITY                              SCC8 CODE

        ACTION 01 SCHD  7/30/75  ACHV  7/30/75  ACT-TYPE 02   BINDING COMMITMENT TO PURCHASE CONTROL EQUIPMENT
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 02 SCHD 11/ 1/75  ACHV 11/ 1/75  ACT-TYPE 03   INITIATION OF ON SITE CONSTRUCTION/PROCESS CHANGE
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 03 SCHD  3/15/76  ACHV  4/29/76  ACT-TYPE 05   FINAL COMPLIANCE
                                                              STAFF                          RESULTS  00                RDE8  0
*****************************************************************************************************************
   POINT NUMBER  902     MULT                POINT CMPL  5 IN COMPL W SCHEDULE     STATE/LOC REGUL APC-5                CMS2
   POLLUTANT     PT                          POINT-SIP     NOT SPECIFIED           PT EMIS CAT     0 UNKNOWN            RDE7
   DESCRIPTION   DROSS MILL                  CAPACITY                              SCC8 CODE

        ACTION 01 SCHD  8/31/75  ACHV  8/31/75  ACT-TYPE 02   BINDING COMMITMENT TO PURCHASE CONTROL EQUIPMENT
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 02 SCHD  4/30/76  ACHV  4/29/76  ACT-TYPE 03   INITIATION OF ON SITE CONSTRUCTION/PROCESS CHANGE
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 03 SCHD 10/15/76  ACHV  9/17/76  ACT-TYPE 05   FINAL COMPLIANCE
                                                              STAFF                          RESULTS  00                RDE8  0
*****************************************************************************************************************
   POINT NUMBER  903     MULT                POINT CMPL  5 IN COMPL W SCHEDULE     STATE/LOC REGUL APC-5                CMS2
   POLLUTANT     PT                          POINT-SIP     NOT SPECIFIED           PT EMIS CAT     0 UNKNOWN            RDE7
   DESCRIPTION   RE:POINTS 900,901,902       CAPACITY                              SCC8 CODE

        ACTION 01 SCHD 12/31/75  ACHV 12/31/75  ACT-TYPE 01   SUBMISSION OF FINAL CONTROL PLAN
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 02 SCHD  7/ 1/75  ACHV  7/ 1/75  ACT-TYPE 08   PROGRESS REPORT TO EPA
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 03 SCHD 10/ 1/75  ACHV 10/ 1/75  ACT-TYPE 08   PROGRESS REPORT TO EPA
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 05 SCHD  4/ 1/76  ACHV  4/29/76  ACT-TYPE 08   PROGRESS REPORT TO EPA
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 06 SCHD  7/ 1/76  ACHV  6/16/76  ACT-TYPE 08   PROGRESS REPORT TO EPA
                                                              STAFF                          RESULTS  00                RDE8  0
        ACTION 07 SCHD 10/15/76  ACHV  9/17/76  ACT-TYPE 08   PROGRESS REPORT TO EPA
                                                              STAFF                          RESULTS  00                RDE8  0
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SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 6

WABASH SMELTING SECONDARY ALUMINUM SCREENING STUDY

STATE IN COUNTY WABASH FEDF NON-FED RDE1

COUNTY 4320 SOURCE 00010 AQCR 084 CITY 4300 APCD 1 SIP - ACTIVE RDE2

APST OPERATING RDE3

POINT NUMBER 904 MULT POINT CMPL 0 COMPL STATUS UNKNOWN STATE/LOC REGUL CMB2

POLLUTANT POINT-SIP NOT SPECIFIED PT EMIS CAT 0 UNKNOWN RDE7

DESCRIPTION SCRUBBER MONITORS CAPACITY SCCS CODE

ACTION 01	SCHD	1/ 1/77	ACHV	12/22/76	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF		
ACTION 02	SCHD	4/ 1/77	ACHV	3/15/77	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF K01	RESULTS	RDE8
ACTION 03	SCHD	7/ 1/77	ACHV	6/21/77	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 04	SCHD	10/ 1/77	ACHV	9/20/77	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 05	SCHD	1/ 1/78	ACHV	12/16/77	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 06	SCHD	4/ 1/78	ACHV	3/16/78	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 07	SCHD	7/ 1/78	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 08	SCHD	10/ 1/78	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 09	SCHD	1/ 1/79	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 10	SCHD	4/ 1/79	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 11	SCHD	7/ 1/79	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 12	SCHD	10/ 1/79	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
ACTION 13	SCHD	1/ 1/80	ACHV	/ /	ACT-TYPE 08	PROGRESS REPORT TO EPA STAFF	RESULTS	RDE8
							RESULTS	RDE8

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                                        SOURCE DATA REPORT
06/02/78                                COMPLIANCE DATA SYSTEM                                                    PAGE      3
S-G METALS                        SECONDARY ALUMINUM SCREENING STUDY                                   FEDF   NON-FED        RDE1 1
STATE  KS    COUNTY WYANDOTTE                                                                          APCD 0 SIP SOURCE     RDE2
COUNTY 3840  SOURCE 00003  AQCR 094  CITY 1800                                                         APST   OPERATING      RDE3
SOURCE NAME    S-G METALS                STATE REGIST                          SIC  3341              RDE4
ADDRESS        RIVERVIEW AT 2ND ST       NEDS XREF      0015                   RDE4                   STAFF MEMBER  012
CITY, STATE    KANSAS CITY KS 66118      PRIORITY                              RDE5                   LAST-UPDATE   5/20/78
POINT NUMBER  000      MULT              SOURCE CMPL 3 IN COMPL-INSPECTION     STATE/LOC REGUL                                CM82
POLLUTANT                                SOURCE-SIP  0 NO SCHEDULE             SOURCE EMIS CAT 2 100 TO 1000 TPY              RDE7
DESCRIPTION    ENTIRE SOURCE             CAPACITY                              SCCS CODE
               COMMENT 1       IN COMPLIANCE AS PER SDT

     ACTION 01 SCHD  3/21/75  ACHV  3/21/75  ACT-TYPE 07   STATE INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
               COMMENT 1       NOT IN COMP
     ACTION 02 SCHD  6/20/75  ACHV  6/20/75  ACT-TYPE 52   EPA INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
               COMMENT 1       NOT IN COMP - CLOSE SURVEILLANCE RECOMMENDED
     ACTION 03 SCHD  9/ 4/75  ACHV  9/ 4/75  ACT-TYPE 07   STATE INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 04 SCHD 12/16/75  ACHV 12/16/75  ACT-TYPE 52   EPA INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
               COMMENT 1       IN COMP
     ACTION 05 SCHD  3/ 3/76  ACHV  3/ 3/76  ACT-TYPE 07   STATE INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
               COMMENT 1       IN COMP
     ACTION 06 SCHD 10/ 8/76  ACHV 10/ 8/76  ACT-TYPE 07   STATE INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 07 SCHD 10/ 8/76  ACHV 10/ 8/76  ACT-TYPE 23   IN STATE OPACITY OBSERVATIONS
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 08 SCHD  2/ 1/77  ACHV  2/ 1/77  ACT-TYPE 52   EPA INSPECTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 09 SCHD  3/ 3/77  ACHV  3/ 3/77  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 10 SCHD  3/23/77  ACHV  3/23/77  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 11 SCHD 10/27/77  ACHV 10/27/77  ACT-TYPE 27   INSPECTION AND OPACITY OBSERVATION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 12 SCHD 11/23/77  ACHV 11/23/77  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
               COMMENT 1       MALFUNCTIONS  FROM 3/31/77 THROUGH 11/15/77
     ACTION 13 SCHD 12/20/77  ACHV 12/20/77  ACT-TYPE 98   FORMAL INQUIRY
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
               COMMENT 1       RQSTD INFO RE MALFUNCTIONS AND BREAKDOWNS
     ACTION 14 SCHD 12/21/77  ACHV 12/21/77  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 15 SCHD 12/22/77  ACHV 12/22/77  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 16 SCHD 12/28/77  ACHV 12/28/77  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 17 SCHD  1/18/78  ACHV  1/18/78  ACT-TYPE 13   SOURCE MALFUNCTION
                                                           STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 18 SCHD  1/23/78  ACHV  1/23/78  ACT-TYPE 13   SOURCE MALFUNCTION
```

SOURCE DATA REPORT

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06/02/78                                    COMPLIANCE DATA SYSTEM                                                    PAGE      4
S-G METALS                          SECONDARY ALUMINUM SCREENING STUDY                                  FEDF   NON-FED        RDE1 1
STATE  KS    COUNTY WYANDOTTE                                                                          APCD 0 SIP SOURCE     RDE2
COUNTY 3840  SOURCE 00003  AQCR 094  CITY 1800                                                         APST   OPERATING      RDE3
                                                                STAFF   K01 GALE WRIGHT        RESULTS  01 ACTION ACHIEVED  RDE8
      ACTION 19 SCHD  2/14/78  ACHV  2/14/78  ACT-TYPE 13      SOURCE MALFUNCTION
                                                                STAFF   K01 GALE WRIGHT        RESULTS  01 ACTION ACHIEVED  RDE8
      ACTION 20 SCHD  2/22/78  ACHV  2/22/78  ACT-TYPE 13      SOURCE MALFUNCTION
                                                                STAFF   K01 GALE WRIGHT        RESULTS  01 ACTION ACHIEVED  RDE8
      ACTION 21 SCHD  3/ 9/78  ACHV  3/ 9/78  ACT-TYPE 13      SOURCE MALFUNCTION
                                                                STAFF   K01 GALE WRIGHT        RESULTS  01 ACTION ACHIEVED  RDE8
      ACTION 22 SCHD  3/20/78  ACHV  3/20/78  ACT-TYPE 27      INSPECTION AND OPACITY OBSERVATION
                                                                STAFF   K01 GALE WRIGHT        RESULTS  01 ACTION ACHIEVED  RDE8
      ACTION 23 SCHD  4/17/78  ACHV  4/17/78  ACT-TYPE 52      EPA INSPECTION
                                                                STAFF   E05 JOE ARELLO         RESULTS  01 ACTION ACHIEVED  RDE8
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                                                  SOURCE DATA REPORT
*****************************************************************************************************************
 06/02/78                                        COMPLIANCE DATA SYSTEM                                    PAGE      5
 TOWER METALS PROD                      SECONDARY ALUMINUM SCREENING STUDY                          FEDF   NON-FED        RDE1
 STATE  KS     COUNTY BOURBON                                                                       APCD 7 NEW SOURCE REVRDE2
 COUNTY 0300  SOURCE 00600  AQCR 098  CITY 1100                                                     APST   OPERATING      RDE3
*****************************************************************************************************************
   SOURCE NAME    TOWER METALS PROD          STATE REGIST                    SIC  3341              RDE6
   ADDRESS        PO BOX 791                 NEDS XREF                       RDE4                   STAFF MEMBER
   CITY, STATE    FORT SCOTT KS 66701        PRIORITY                        RDE5 1                 LAST-UPDATE   11/16/77

   COMMENT 1MR WADE COBERLY
           2POLLUTION CNTRL DEVICE FOR EXISTING ALUMINUM FURNACES
*****************************************************************************************************************
   POINT NUMBER  000      MULT                SOURCE CMPL 8 NO APPLIC STATE REG     STATE/LOC REGUL 28-19-20 & 50          CMS2 C
   POLLUTANT                                  SOURCE-SIP  0 NO SCHEDULE             SOURCE EMIS CAT 2 100 TO 1000 TPY      RDE7
   DESCRIPTION    ENTIRE SOURCE               CAPACITY                              SCC8 CODE
                COMMENT 1       (NEW) #2 FURNACE

        ACTION 01 SCHD  3/11/75  ACHV  3/11/75  ACT-TYPE 40   FINAL APPROVAL OF NEW/MOD SOURCE
                                                              STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
                COMMENT 1       #2 FURNACE, TO BE CONTROLLED BY USING INTEC CHLORINATOR
        ACTION 02 SCHD 11/25/75  ACHV 11/25/75  ACT-TYPE 40   FINAL APPROVAL OF NEW/MOD SOURCE
                                                              STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
                COMMENT 1       #2 FURNACE, TO BE CONTROLLED THRU USE OF THE "DERHAM" PRCSS
                        2       (DEMAGGING OPERATIONS)
        ACTION 03 SCHD  6/ 7/76  ACHV  6/ 7/76  ACT-TYPE 40   FINAL APPROVAL OF NEW/MOD SOURCE
                                                              STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
                COMMENT 1       POLLUTION CNTRL EQPMNT FOR "T" & "M" FURNACES
        ACTION 04 SCHD 11/16/76  ACHV 11/16/76  ACT-TYPE 40   FINAL APPROVAL OF NEW/MOD SOURCE
                                                              STAFF   K01 GALE WRIGHT       RESULTS  01 ACTION ACHIEVED  RDE8
                COMMENT 1       "M" FURNACE TO BE TURNED & EQPD WITH "WABASH" CNTRL SYSTEM
                        2       "M(#1-C)" FURNACE TO BE ALTERED TO ACCOMMODATE THE "DERHAM"
                        3       PROCESS; THE FLORIDATION SYSTEM TO BE ELIMINATED
*****************************************************************************************************************
   POINT NUMBER  001      MULT                POINT CMPL  8 NO APPLIC STATE REG     STATE/LOC REGUL 28-19-20 & 50          CMS2 C
   POLLUTANT                                  POINT-SIP     NOT SPECIFIED           PT EMIS CAT     0 UNKNOWN              RDE7
   DESCRIPTION    "T"&"M" FURNACE CNTRL EQP   CAPACITY                              SCC8 CODE
                COMMENT 1       CHARGE RATE 3.5 TONS/HR = "T" FURNACE CNTRLS: WABASH SYSTEM
                        2       CHARGE RATE 2.5 TONS/HR = "M" FURNACE CNTRLS: WABASH SYSTEM
*****************************************************************************************************************
   POINT NUMBER  002      MULT                POINT CMPL  8 NO APPLIC STATE REG     STATE/LOC REGUL 28-19-50               CMS2 C
   POLLUTANT                                  POINT-SIP     NOT SPECIFIED           PT EMIS CAT     0 UNKNOWN              RDE7
   DESCRIPTION    #2 FURNACE                  CAPACITY                              SCC8 CODE
```

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                                                SOURCE DATA REPORT
*****************************************************************************************************************
 06/02/78                                   COMPLIANCE DATA SYSTEM                                          PAGE      1
 MICH STANDARD ALLOY                  SECONDARY ALUMINUM SCREENING STUDY
 STATE  MI     COUNTY BERRIEN                                                                  FEDF    NON-FED        RDE1
 COUNTY 0540   SOURCE 00010  AQCR 082  CITY 0460                                                APCD 0 SIP SOURCE      RDE2
                                                                                                 APST    OPERATING      RDE3
*****************************************************************************************************************
   SOURCE NAME    MICH STANDARD ALLOY        STATE REGIST  B3642              SIC  3341          RDE6
   ADDRESS        01256MILTON                NEDS XREF     0010               RDE4               STAFF MEMBER
   CITY, STATE    BENTON HARBOR MI 49022     PRIORITY                         RDE5               LAST-UPDATE    2/10/77
*****************************************************************************************************************
   POINT NUMBER   000      MULT              SOURCE CMPL 4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                    CMS2
   POLLUTANT                                 SOURCE-SIP    NOT SPECIFIED           SOURCE EMIS CAT 1 LESS THAN 100 TPY   RDE7 1
   DESCRIPTION    ENTIRE SOURCE              CAPACITY                              SCC8 CODE

       ACTION 01 SCHD  3/ 1/76  ACHV   / /    ACT-TYPE 86   TEAM COMPLIANCE SPECIALIST TO CHECK
                                                                STAFF                          RESULTS  00          RDE8  0
*****************************************************************************************************************
   POINT NUMBER   010      MULT              POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL RULE 44            CMS2
   POLLUTANT      PT                         POINT-SIP   0 NO SCHEDULE             PT EMIS CAT     2 100 TO 1000 TPY    RDE7
   DESCRIPTION    ALUM CHLORINE STATION      CAPACITY                              SCC8 CODE       304001
*****************************************************************************************************************
   POINT NUMBER   020      MULT              POINT CMPL  1 NOT IN COMPL-NO SCHD    STATE/LOC REGUL RULE 44            CMS2
   POLLUTANT      PT                         POINT-SIP     NOT SPECIFIED           PT EMIS CAT     1 LESS THAN 100 TPY  RDE7
   DESCRIPTION    ALUM REVERB FURNACE        CAPACITY                              SCC8 CODE       304001
```

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                                                SOURCE DATA REPORT
*****************************************************************************************************************
 06/02/78                                   COMPLIANCE DATA SYSTEM                                          PAGE     11
 NORTHWESTERN METAL                  SECONDARY ALUMINUM SCREENING STUDY
 STATE  NE    COUNTY LANCASTER                                                                  FEDF    NON-FED        RDE1
 COUNTY 1520  SOURCE 00010  AGCR 145  CITY 1560                                                 APCD 0 SIP SOURCE      RDE2
                                                                                                 APST    OPERATING      RDE3
*****************************************************************************************************************
   SOURCE NAME   NORTHWESTERN METAL        STATE REGIST                      SIC  3341          RDE6
   ADDRESS       NORTH 27TH INDUS PK       NEDS XREF      0037               RDE4               STAFF MEMBER
   CITY, STATE   LINCOLN NE 68501          PRIORITY                          RDE5               LAST-UPDATE    5/11/78
*****************************************************************************************************************
   POINT NUMBER  000      MULT             SOURCE CMPL 4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                      CMS2
   POLLUTANT                               SOURCE-SIP  0 NO SCHEDULE             SOURCE EMIS CAT 1 LESS THAN 100 TPY  RDE7
   DESCRIPTION   ENTIRE SOURCE             CAPACITY                              SCCS CODE

        ACTION 01 SCHD  6/30/75  ACHV  6/30/75  ACT-TYPE 07   STATE INSPECTION
                                                              STAFF   N01 PETE CULVER       RESULTS  01 ACTION ACHIEVED  RDE8
*****************************************************************************************************************
   POINT NUMBER  001      MULT             POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL SECTION 11           CMS2
   POLLUTANT     PT                        POINT-SIP   0 NO SCHEDULE             PT EMIS CAT     1 LESS THAN 100 TPY  RDE7
   DESCRIPTION   OPEN BURNING              CAPACITY                              SCCS CODE       503002
                COMMENT 1      INSTALL INCINERATOR
```

SOURCE DATA REPORT

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06/02/78                                  COMPLIANCE DATA SYSTEM                                                    PAGE      6
J.R. ELKINS                          SECONDARY ALUMINUM SCREENING STUDY                                  FEDF   NON-FED        RDE1
STATE  NY     COUNTY KINGS                                                                             APCD 0 SIP SOURCE     RDE2
COUNTY 3440   SOURCE 00034  AQCR 043  CITY    0                                                          APST   OPERATING      RDE3
SOURCE NAME    J.R. ELKINS                STATE REGIST  6100000222 2085   SIC  3341                  RDE6
ADDRESS        GARDNER&SCOTT AVES.        NEDS XREF                       RDE4                        STAFF MEMBER
CITY, STATE    BROOKLYN NY                PRIORITY                        RDE5                        LAST-UPDATE    5/27/78

COMMENT 1ADDRESS-518,571 GARDNER AND 470 SCOTT AVENUE.
FACILITY CAPACITY            RDE 9 0008214              RDE 10                  RDE 11                  RDE 12
POLLUTANT                    COMPLIANCE                 EMISSION CATEGORY       AQCR INDICATCR          AQMA INDICATOR     LOADING
PT PART. MATTER              5 IN COMPL W SCHEDULE      0 UNKNOWN                                          NO
S2 SULFUR OXIDES             4 IN COMPL-CERTIFICATN     0 UNKNOWN                                          NO
HC HYDROCARBONS              4 IN COMPL-CERTIFICATN     0 UNKNOWN                                          NO
CO CARBON MONOXIDE           4 IN COMPL-CERTIFICATN     0 UNKNOWN                                          NO
N2 NITROGEN DIOXIDE          4 IN COMPL-CERTIFICATN     0 UNKNOWN                                          NO
POINT NUMBER  000      MULT                SOURCE CMPL 5 IN COMPL W SCHEDULE     STATE/LOC REGUL                                CM82
POLLUTANT                                  SOURCE-SIP  4 COURT ORD/CONSNT DEC    SOURCE EMIS CAT 2 100 TO 1000 TPY              RDE7
DESCRIPTION   ENTIRE SOURCE                CAPACITY                              SCCS CODE
              COMMENT 1      ALMOST ALL WORK COMPLETE(ONLY CHIP DRYER IN PROGRESS).

     ACTION 01 SCHD  2/ 3/77  ACHV  2/ 3/77  ACT-TYPE 50   EPA SOURCE INSPECTION
                                                            STAFF   905 D SANTELLA        RESULTS  01 ACTION ACHIEVED  RDE8
     ACTION 02 SCHD  9/ 2/77  ACHV  9/ 2/77  ACT-TYPE 52   EPA SURVEILLANCE ACTION
                                                            STAFF   908 S FREY            RESULTS  01 ACTION ACHIEVED  RDE8
              COMMENT 1      NO PROBLEMS NOTED.
```

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 12

ROCHESTER SMELT&REF SECONDARY ALUMINUM SCREENING STUDY

STATE NY COUNTY MONROE

COUNTY 4380 SOURCE 00050 AQCR 160 CITY 5760

FEDF NON-FED RDE1
APCD 0 SIP SOURCE RDE2
APST OPERATING RDE3

SOURCE NAME ROCHESTER SMELT&REF
ADDRESS 26 SHERER ST
CITY, STATE ROCHESTER NY 14611

STATE REGIST 2614000760
NEDB XREF 0760
PRIORITY

SIC 3341
RDE4
RDE5

RDE6
STAFF MEMBER 102 P KAHN
LAST-UPDATE 9/25/78

FACILITY CAPACITY 213

POLLUTANT	RDE 9 COMPLIANCE	RDE 10 EMISSION CATEGORY	RDE 11 AQCR INDICATOR	RDE 12 AQMA INDICATOR	LOADING
PT PART. MATTER	4 IN COMPL-CERTIFICATN	1 LESS THAN 100 TPY		NO	42
HC HYDROCARBONS	4 IN COMPL-CERTIFICATN	4 LESS THAN 25 TPY	N NON-ATTAINMENT	NO	1

POINT NUMBER 000 PULT

POLLUTANT

DESCRIPTION ENTIRE SOURCE

SOURCE CMPL 4 IN COMPL-CERTIFICATN
SOURCE-SIP 0 NO SCHEDULE
CAPACITY

STATE/LOC REGUL
SOURCE EMIS CAT 2 100 TO 1000 TPY
SCCS CODE

CM32
RDE7

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                                        SOURCE DATA REPORT
06/02/78                                                                                                                  PAGE     13
ROTH BROS. METAL CO                     COMPLIANCE DATA SYSTEM
STATE  NY    COUNTY ONONDAGA            SECONDARY ALUMINUM SCREENING STUDY
COUNTY 5100  SOURCE 00002  AQCR 158  CITY    0                                                   FEDF   NON-FED        RDE1
                                                                                                 APCD 0 SIP SOURCE     RDE2 7
                                                                                                 APST   OPERATING      RDE3
SOURCE NAME    ROTH BROS. METAL CO      STATE REGIST  312601041 9+420     SIC  3341             RDE6
ADDRESS        THOMPSON RD              NEDS XREF     0419                RDE4                  STAFF MEMBER  905 D SANTELLA
CITY, STATE    EAST SYRACUSE NY         PRIORITY                          RDE5                  LAST-UPDATE    6/ 1/78

FACILITY CAPACITY          RDE 9                    RDE 10                    RDE 11                RDE 12
POLLUTANT                  COMPLIANCE               EMISSION CATEGORY         AQCR INDICATOR        AQMA INDICATOR      LOADING
PT PART. MATTER            4 IN COMPL-CERTIFICATN   0 UNKNOWN                                       NO
S2 SULFUR OXIDES           4 IN COMPL-CERTIFICATN   0 UNKNOWN                                       NO
HC HYDROCARBONS            4 IN COMPL-CERTIFICATN   0 UNKNOWN                                       NO
CO CARBON MONOXIDE         0 COMPL STATUS UNKNOWN   0 UNKNOWN                                       NO
N2 NITROGEN DIOXIDE        0 COMPL STATUS UNKNOWN   0 UNKNOWN                                       NO

POINT NUMBER  000      MULT                 SOURCE CMPL 3 IN COMPL-INSPECTION     STATE/LOC REGUL                          CMS2
POLLUTANT                                   SOURCE-SIP  0 NO SCHEDULE             SOURCE EMIS CAT 2 100 TO 1000 TPY        RDE7
DESCRIPTION    ENTIRE SOURCE                CAPACITY                              SCCB CODE

     ACTION 01 SCHD  1/13/76  ACHV  1/13/76  ACT-TYPE 52   EPA INSPECTION
                                                           STAFF   905 D SANTELLA        RESULTS  01 ACTION ACHIEVED  RDE8  0
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SOURCE DATA REPORT

06/02/78

LEE IRON & METAL

COMPLIANCE DATA SYSTEM

SECONDARY ALUMINUM SCREENING STUDY

PAGE 2

STATE NC COUNTY LEE

COUNTY 2280 SOURCE 00083 AQCR 166 CITY 3580

FEDF NON-FED RDE1

APCD 0 SIP SOURCE RDE2

APST OPERATING RDE3 M

SOURCE NAME LEE IRON & METAL

ADDRESS BOX 778

CITY, STATE SANFORD NC 27330

STATE REGIST

NEDS XREF

PRIORITY

SIC 3341

RDE4

RDE5

RDE6

STAFF MEMBER N68

LAST-UPDATE 4/ 6/78

POINT NUMBER 000 MULT

POLLUTANT

DESCRIPTION ENTIRE SOURCE

SOURCE CMPL 4 IN COMPL-CERTIFICATN

SOURCE-SIP NOT SPECIFIED

CAPACITY

STATE/LOC REGUL

SOURCE EMIS CAT 2 100 TO 1000 TPY

SCCS CODE

CMS2

RDE7

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                                        SOURCE DATA REPORT
06/02/78                                COMPLIANCE DATA SYSTEM                                                  PAGE      2
ALUMINUM SMELT&REF                  SECONDARY ALUMINUM SCREENING STUDY                                  FEDF    NON-FED          RDE1 1
STATE  OH     COUNTY CUYAHOGA                                                                           APCD 0 SIP SOURCE        RDE2
COUNTY 1600  SOURCE 00260  AQCR 174  CITY 3880                                                          APST   OPERATING         RDE3
SOURCE NAME    ALUMINUM SMELT&REF      STATE REGIST  1318372163        SIC  3341                        RDE6
ADDRESS        5463 DUNHAM RD          NEDS XREF                       RDE4                             STAFF MEMBER
CITY, STATE    MAPLE HTS OH 44137      PRIORITY        0               RDE5                             LAST-UPDATE    5/ 4/78
POINT NUMBER   000      MULT           SOURCE CMPL 1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL                                    CMS2
POLLUTANT                              SOURCE-SIP     NOT SPECIFIED         SOURCE EMIS CAT 3 OVER 1000 TPY                    RDE7
DESCRIPTION    ENTIRE SOURCE           CAPACITY                             SCC8 CODE

     ACTION 90 SCHD  3/17/77  ACHV  3/17/77  ACT-TYPE 51   114 LETTER SENT
                                                           STAFF   K01
                                                                                  RESULTS                                     RDE8
POINT NUMBER   010      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P001-ALUM FURNACE  #2   CAPACITY                             SCC8 CODE
POINT NUMBER   020      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P002-ALUM FURNACE  #4   CAPACITY                             SCC8 CODE
POINT NUMBER   030      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P003-ALUM FURNACE  #5   CAPACITY                             SCC8 CODE
POINT NUMBER   040      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     2 100 TO 1000 TPY                  RDE7
DESCRIPTION    P005-ALUM FURNACE  #7   CAPACITY                             SCC8 CODE
POINT NUMBER   050      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P006-ALUM FURNACE  #8   CAPACITY                             SCC8 CODE
POINT NUMBER   060      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P007-ALUM FURNACE  #9   CAPACITY                             SCC8 CODE
POINT NUMBER   070      MULT           POINT CMPL  4 IN COMPL-CERTIFICATN   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     2 100 TO 1000 TPY                  RDE7
DESCRIPTION    P008-ALUM FURNACE  #10  CAPACITY                             SCC8 CODE
POINT NUMBER   080      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P009-ALUM FURNACE  #13  CAPACITY                             SCC8 CODE
POINT NUMBER   090      MULT           POINT CMPL  1 NOT IN COMPL-NO SCHD   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P010-ALUM FURNACE  #1   CAPACITY                             SCC8 CODE
POINT NUMBER   100      MULT           POINT CMPL  4 IN COMPL-CERTIFICATN   STATE/LOC REGUL AP-3-12                            CMS2
POLLUTANT      PT                      POINT-SIP      NOT SPECIFIED         PT EMIS CAT     1 LESS THAN 100 TPY                RDE7
DESCRIPTION    P011-DRYING OVEN        CAPACITY                             SCC8 CODE
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SOURCE DATA REPORT

```
06/02/78                                  COMPLIANCE DATA SYSTEM                                                    PAGE      3
ALUMINUM SMELT&REF                  SECONDARY ALUMINUM SCREENING STUDY                                  FEDF    NON-FED        RDE1 1
STATE  OH     COUNTY CUYAHOGA                                                                           APCD 0 SIP SOURCE     RDE2
COUNTY 1600   SOURCE 00260  AQCR 174  CITY 3880                                                        APST    OPERATING      RDE3
```

```
POINT NUMBER  110      MULT                POINT CMPL  6 NOT IN COMPL W SCHD     STATE/LOC REGUL AP-3-12                  CMS2
POLLUTANT     PT                           POINT-SIP     NOT SPECIFIED           PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION   P012-ALUM CHIP DRYER         CAPACITY                              SCC8 CODE
```

```
POINT NUMBER  120      MULT                POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL AP-3-12                  CMS2
POLLUTANT     PT                           POINT-SIP     NOT SPECIFIED           PT EMIS CAT     3 OVER 1000 TPY          RDE7
DESCRIPTION   P013-ALUM DROSS RECL         CAPACITY                              SCC8 CODE
```

```
POINT NUMBER  130      MULT                POINT CMPL  1 NOT IN COMPL-NO SCHD    STATE/LOC REGUL AP-3-12                  CMS2
POLLUTANT     PT                           POINT-SIP     NOT SPECIFIED           PT EMIS CAT     1 LESS THAN 100 TPY      RDE7
DESCRIPTION   P014-                        CAPACITY                              SCC8 CODE
```

```
POINT NUMBER  133      MULT                POINT CMPL  1 NOT IN COMPL-NO SCHD    STATE/LOC REGUL AP-5-07                  CMS2
POLLUTANT     HC                           POINT-SIP     NOT SPECIFIED           PT EMIS CAT     2 100 TO 1000 TPY        RDE7
DESCRIPTION   P014-                        CAPACITY                              SCC8 CODE
```

SOURCE DATA REPORT

06/02/78
BARMET INDUSTRIES
STATE OH COUNTY TUSCARAWAS
COUNTY 6720 SOURCE 00005 AQCR 183 CITY 0

COMPLIANCE DATA SYSTEM
SECONDARY ALUMINUM SCREENING STUDY

PAGE 4

FEDF NON-FED RDE1
APCD 0 SIP SOURCE RDE2
APST OPERATING RDE3 F

SOURCE NAME BARMET INDUSTRIES
ADDRESS NEWPORT RD
CITY, STATE UHRICHSVILLE OH 44683

STATE REGIST 0679030151
NEDS XREF 0036
PRIORITY

SIC 3341
RDE4
RDE5

RDE6
STAFF MEMBER
LAST-UPDATE 4/ 1/78

POINT NUMBER 000 MULT
POLLUTANT
DESCRIPTION ENTIRE SOURCE

SOURCE CMPL S IN COMPL W SCHEDULE
SOURCE-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL
SOURCE EMIS CAT 2 100 TO 1000 TPY
SCC8 CODE

CM82
RDE7

ACTION 01 SCHD 3/ 1/76 ACHV / / ACT-TYPE 50 114 LETTER PLANNED
STAFF

RESULTS 00

RDE8 0

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 9

US REDUCTION SECONDARY ALUMINUM SCREENING STUDY

STATE OH COUNTY LUCAS

COUNTY 3720 SOURCE 00098 AQCR 124 CITY 6600

FEDF NON-FED RDE1 1
APCD 0 SIP SOURCE RDE2
APST OPERATING RDE3

SOURCE NAME US REDUCTION
ADDRESS 3838 CECELIA ST
CITY, STATE TOLEDO OH 43608

STATE REGIST 0448010062
NEDS XREF
PRIORITY

SIC 3341
RDE4
RDE5

RDE6
STAFF MEMBER
LAST-UPDATE 6/18/77

POINT NUMBER 000 MULT
POLLUTANT
DESCRIPTION ENTIRE SOURCE

SOURCE CMPL 4 IN COMPL-CERTIFICATN
SOURCE-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL
SOURCE EMIS CAT 2 100 TO 1000 TPY
SCC8 CODE

CM82
RDE7

POINT NUMBER 010 MULT
POLLUTANT PT
DESCRIPTION P006-BORINGS DRYER

POINT CMPL 4 IN COMPL-CERTIFICATN
POINT-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL AP-3-12
PT EMIS CAT 1 LESS THAN 100 TPY
SCC8 CODE 303001

CM82
RDE7

POINT NUMBER 013 MULT 010
POLLUTANT HC
DESCRIPTION P006-BORINGS DRYER

POINT CMPL 4 IN COMPL-CERTIFICATN
POINT-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL AP-5-07
PT EMIS CAT 1 LESS THAN 100 TPY
SCC8 CODE 303001

CM82
RDE7

POINT NUMBER 020 MULT
POLLUTANT PT
DESCRIPTION P007-FURNACE #25

POINT CMPL 4 IN COMPL-CERTIFICATN
POINT-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL AP-3-12
PT EMIS CAT 2 100 TO 1000 TPY
SCC8 CODE 303001

CM82
RDE7

SOURCE DATA REPORT

06/02/78

COMPLIANCE DATA SYSTEM

ALAN-BARR ALUMINUM

SECONDARY ALUMINUM SCREENING STUDY

PAGE 1

STATE PA COUNTY LEBANON

COUNTY 4900 SOURCE 00015 AQCR 196 CITY 0

FEDF NON-FED RDE1 1

APCD 0 SIP SOURCE RDE2 3

APST OPERATING RDE3

SOURCE NAME ALAN-BARR ALUMINUM

STATE REGIST 23-1339002 01

SIC 3341

RDE6

ADDRESS

NEDS XREF

RDE4

STAFF MEMBER

CITY, STATE PALMYRA PA

PRIORITY

RDE5

LAST-UPDATE 12/22/77

POINT NUMBER 000 MULT

SOURCE CMPL 3 IN COMPL-INSPECTION

STATE/LOC REGUL

CM82

POLLUTANT

SOURCE-SIP 0 NO SCHEDULE

SOURCE EMIS CAT 2 100 TO 1000 TPY

RDE7

DESCRIPTION SECONDARY SMELTING

CAPACITY

SCCS CODE

ACTION 01	SCHD	6/30/76	ACHV	3/18/76	ACT-TYPE 08	STATE INSPECTION STAFF			
ACTION 02	SCHD	9/30/77	ACHV	8/19/76	ACT-TYPE 08	STATE INSPECTION STAFF	RESULTS	01 ACTION ACHIEVED	RDE8
ACTION 03	SCHD	9/30/78	ACHV	/ /	ACT-TYPE 08	STATE INSPECTION STAFF	RESULTS	30 IN COMPLIANCE	RDE8
							RESULTS		RDE8

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 1

BATCHELDER BLASIUS SECONDARY ALUMINUM SCREENING STUDY

STATE SC COUNTY SPARTANBURG

COUNTY 2060 SOURCE 00020 AQCR 202 CITY 2040

FEDF NON-FED RDE1
APCD 0 SIP SOURCE RDE2
APST OPERATING RDE3 M

SOURCE NAME BATCHELDER BLASIUS
ADDRESS BOX 5503
CITY, STATE SPARTANBURG SC 29301

STATE REGIST
NEDS XREF 0020
PRIORITY

SIC 3341 RDE4
RDE5

RDE6
STAFF MEMBER
LAST-UPDATE 4/19/78

POINT NUMBER 000 MULT
POLLUTANT
DESCRIPTION ENTIRE SOURCE

SOURCE CMPL 5 IN COMPL W SCHEDULE
SOURCE-SIP 0 NO SCHEDULE
CAPACITY

STATE/LOC REGUL CM82
SOURCE EMIS CAT 2 100 TO 1000 TPY RDE7 5
SCC8 CODE

ACTION 01	SCHD	6/18/75	ACHV	6/18/75	ACT-TYPE A5	RE-INSPECTION STAFF	RESULTS 01 ACTION ACHIEVED	RDE8
ACTION 02	SCHD	/ /	ACHV	12/13/76	ACT-TYPE 29	STATE PROCESS INSPECTION STAFF	RESULTS	RDE8
ACTION 03	SCHD	/ /	ACHV	12/ 6/76	ACT-TYPE 27	STATE COMPLIANCE INSPECTION STAFF	RESULTS	RDE8
ACTION 04	SCHD	4/ 8/77	ACHV	4/ 8/77	ACT-TYPE 64	EPA DEFERRAL TO STATE STAFF	RESULTS	RDE8
ACTION 05	SCHD	/ /	ACHV	4/18/77	ACT-TYPE 29	STATE PROCESS INSPECTION STAFF	RESULTS	RDE8
ACTION 06	SCHD	9/15/78	ACHV	/ /	ACT-TYPE E5	FINAL COMPLIANCE STAFF A66 COLE	RESULTS	RDE8
ACTION 07	SCHD	6/15/78	ACHV	/ /	ACT-TYPE E4	COMPLETE CONSTRUCTION STAFF A66 COLE	RESULTS	RDE8
ACTION 08	SCHD	5/27/77	ACHV	5/27/77	ACT-TYPE B2	STATE ORDER RECEIVED STAFF A66 COLE	RESULTS	RDE8
ACTION 09	SCHD	1/15/78	ACHV	1/15/78	ACT-TYPE E3	BEGIN CONTRUCTION STAFF A66 COLE	RESULTS	RDE8
ACTION 10	SCHD	4/30/77	ACHV	4/30/77	ACT-TYPE E1	PLAN SUBMITTAL STAFF A67 YEAST	RESULTS	RDE8
ACTION 11	SCHD	6/15/77	ACHV	6/15/77	ACT-TYPE E2	AWARD CONTRACTS STAFF A66 COLE	RESULTS	RDE8
ACTION 12	SCHD	6/15/78	ACHV	/ /	ACT-TYPE 00	CONSENT ORDER STAFF	RESULTS	RDE8
ACTION 13	SCHD	9/ 1/78	ACHV	/ /	ACT-TYPE 00	CONSENT ORDER STAFF	RESULTS	RDE8
COMMENT 1		FULL COMPLIANCE						
ACTION 14	SCHD	9/ 1/78	ACHV	/ /	ACT-TYPE 00	CONSENT ORDER STAFF	RESULTS	RDE8
COMMENT 1		COMPLETE CONSTRUCTION/INSTALLATION OF EQUIPMENT						

POINT NUMBER 010 MULT
POLLUTANT PT
DESCRIPTION

POINT CMPL 4 IN COMPL-CERTIFICATN
POINT-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL CM82
PT EMIS CAT 4 LESS THAN 25 TPY RDE7
SCC8 CODE 304001

POINT NUMBER 030 MULT
POLLUTANT PT
DESCRIPTION

POINT CMPL 4 IN COMPL-CERTIFICATN
POINT-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL CM82
PT EMIS CAT 4 LESS THAN 25 TPY RDE7
SCC8 CODE 304001

POINT NUMBER 040 MULT
POLLUTANT PT
DESCRIPTION

POINT CMPL 4 IN COMPL-CERTIFICATN
POINT-SIP NOT SPECIFIED
CAPACITY

STATE/LOC REGUL CM82
PT EMIS CAT 1 LESS THAN 100 TPY RDE7
SCC8 CODE 304001

```
                                                  SOURCE DATA REPORT
*****************************************************************************************************************
 06/02/78                                        COMPLIANCE DATA SYSTEM                                  PAGE      1
 AMERICAN RECYCLE CO                   SECONDARY ALUMINUM SCREENING STUDY                          FEDF   NON-FED        RDE1 I
 STATE  TN     COUNTY MAURY                                                                        APCD 0 SIP SOURCE     RDE2
 COUNTY 2300  SOURCE 00081  AQCR 208  CITY 2500                                                    APST   OPERATING      RDE3 M
*****************************************************************************************************************
   SOURCE NAME   AMERICAN RECYCLE CO        STATE REGIST  60-00081          SIC  3341              RDE6
   ADDRESS       PO BOX 525                 NEDS XREF     0081              RDE4                   STAFF MEMBER  T68
   CITY, STATE   MT PLEASANT TN 38474       PRIORITY      0                 RDE5                   LAST-UPDATE   5/17/78

   COMMENT 1TN NO. IS 60-00081
*****************************************************************************************************************
   POINT NUMBER  000      MULT              SOURCE CMPL 6 NOT IN COMPL W SCHD     STATE/LOC REGUL                  CMS2
   POLLUTANT                                SOURCE-SIP    NOT SPECIFIED           SOURCE EMIS CAT 2 100 TO 1000 TPY  RDE7
   DESCRIPTION   ENTIRE SOURCE              CAPACITY                              SCC8 CODE

        ACTION 01 SCHD  6/ 7/77  ACHV  6/ 7/77  ACT-TYPE A7   VISIBLE EMISSION EVALUATION
                                                              STAFF                          RESULTS                RDE8
        ACTION 02 SCHD  6/ 7/77  ACHV  6/ 7/77  ACT-TYPE A4   INSPECTION
                                                              STAFF                          RESULTS                RDE8
        ACTION 03 SCHD  1/ 5/78  ACHV  1/ 5/78  ACT-TYPE A4   INSPECTION
                                                              STAFF    A63 HELLWIG           RESULTS                RDE8
        ACTION 04 SCHD  4/ 1/78  ACHV   /  /    ACT-TYPE C1   CIVIL/CRIMINAL ACTION
                                                              STAFF    A63 HELLWIG           RESULTS                RDE8
*****************************************************************************************************************
   POINT NUMBER  001      MULT              POINT CMPL  6 NOT IN COMPL W SCHD     STATE/LOC REGUL CH V-2(B)        CMS2
   POLLUTANT     VE                         POINT-SIP   3 STATE ENF/ADM ORDERS    PT EMIS CAT     2 100 TO 1000 TPY  RDE7
   DESCRIPTION   2 ROTARY FURNACES          CAPACITY                              SCC8 CODE       304001
                COMMENT 1      HOODING DUCT WORK AND SCRUBBER UNIT FOR FURNACES
*****************************************************************************************************************
   POINT NUMBER  002      MULT 002          POINT CMPL  6 NOT IN COMPL W SCHD     STATE/LOC REGUL CH V-2(B)        CMS2
   POLLUTANT     VE                         POINT-SIP   3 STATE ENF/ADM ORDERS    PT EMIS CAT     2 100 TO 1000 TPY  RDE7
   DESCRIPTION   GRINDING OPERATIONS        CAPACITY                              SCC8 CODE       304001
                COMMENT 1      DUST COLLECTOR SYSTEM FOR BALL MILLS AND SCREENS
*****************************************************************************************************************
   POINT NUMBER  101      MULT 001          POINT CMPL  6 NOT IN COMPL W SCHD     STATE/LOC REGUL CH 7 SEC 2D      CMS2
   POLLUTANT     PT                         POINT-SIP     NOT SPECIFIED           PT EMIS CAT     2 100 TO 1000 TPY  RDE7
   DESCRIPTION                              CAPACITY                              SCC8 CODE       304001

        ACTION 01 SCHD  8/31/76  ACHV  8/31/76  ACT-TYPE A8   NOTICE OF VIOLATION
                                                              STAFF                          RESULTS                RDE8
```

```
                                                  SOURCE DATA REPORT
*****************************************************************************************************************
 06/02/78                                        COMPLIANCE DATA SYSTEM                                    PAGE      2
 HYMAN VIENER & SONS                      SECONDARY ALUMINUM SCREENING STUDY                          FEDF   NON-FED        RDE1 1
 STATE  VA     COUNTY RICHMOND CITY                                                                   APCD 0 SIP SOURCE     RDE2 5
 COUNTY 2660   SOURCE 00017  AQCR 225  CITY 2660                                                       APST   OPERATING      RDE3
*****************************************************************************************************************
   SOURCE NAME    HYMAN VIENER & SONS       STATE REGIST  50393          SIC  3341                  RDE6
   ADDRESS        PO BOX 573                NEDS XREF                    RDE4                       STAFF MEMBER
   CITY, STATE    RICHMOND VA 23205         PRIORITY                     RDE5                       LAST-UPDATE    3/30/78
*****************************************************************************************************************
   POINT NUMBER  000      MULT              SOURCE CMPL 4 IN COMPL-CERTIFICATN    STATE/LOC REGUL                      CMS2
   POLLUTANT                                SOURCE-SIP  3 STATE ENF/ADM ORDERS    SOURCE EMIS CAT 2 100 TO 1000 TPY    RDE7
   DESCRIPTION    SECONDARY SHELTING        CAPACITY                              SCCS CODE

        ACTION 02 SCHD  9/30/77  ACHV  9/20/77  ACT-TYPE 08   STATE INSPECTION
                                                              STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8
        ACTION 03 SCHD  9/30/78  ACHV   / /     ACT-TYPE 08   STATE INSPECTION
                                                              STAFF                          RESULTS                      RDE8
        ACTION 16 SCHD  4/30/78  ACHV   / /     ACT-TYPE 62   NOV ISSUED
                                                              STAFF   E10 GROSS              RESULTS                      RDE8
*****************************************************************************************************************
   POINT NUMBER  010      MULT              POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL 4.04.01(B)(10)       CMS2
   POLLUTANT      PT                        POINT-SIP   3 STATE ENF/ADM ORDERS    PT EMIS CAT     2 100 TO 1000 TPY    RDE7
   DESCRIPTION    CUPOLA & REVERB FURNACE   CAPACITY                              SCCS CODE       304004
                COMMENT 1       INSTALL BAG COLLECTOR

        ACTION 04 SCHD  9/ 1/74  ACHV  9/ 1/74  ACT-TYPE 04   COMPLETION OF ON SITE CONSTRUCTION/PROCESS CHANGE
                                                              STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0
        ACTION 05 SCHD  9/ 1/74  ACHV  9/ 1/74  ACT-TYPE 05   FINAL COMPLIANCE
                                                              STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0
*****************************************************************************************************************
   POINT NUMBER  015      MULT 010          POINT CMPL  4 IN COMPL-CERTIFICATN    STATE/LOC REGUL 4.02                 CMS2
   POLLUTANT      VE                        POINT-SIP   3 STATE ENF/ADM ORDERS    PT EMIS CAT     2 100 TO 1000 TPY    RDE7
   DESCRIPTION    CUPOLA & REVERB FURNACE   CAPACITY                              SCCS CODE       304004

        ACTION 04 SCHD  9/ 1/74  ACHV  9/ 1/74  ACT-TYPE 04   COMPLETION OF ON SITE CONSTRUCTION/PROCESS CHANGE
                                                              STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0
        ACTION 05 SCHD  9/ 1/74  ACHV  9/ 1/74  ACT-TYPE 05   FINAL COMPLIANCE
                                                              STAFF                          RESULTS  01 ACTION ACHIEVED  RDE8  0
```

SOURCE DATA REPORT

06/02/78 COMPLIANCE DATA SYSTEM PAGE 5

MATERIALS REC. CO. SECONDARY ALUMINUM SCREENING STUDY

STATE WA COUNTY KING

COUNTY 0980 SOURCE 10015 AQCR 229 CITY 1840

FEDF NON-FED RDE1
APCD 0 SIP SOURCE RDE2
APST OPERATING RDE3

SOURCE NAME MATERIALS REC. CO. STATE REGIST COS #321 SIC 3341 RDE6
ADDRESS 6760 W MARGINAL WAY NEDS XREF 0060 RDE4 STAFF MEMBER WOA PSAPCA
CITY, STATE SEATTLE WA 98106 PRIORITY RDE5 LAST-UPDATE 5/21/75

POINT NUMBER 000 MULT SOURCE CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL
POLLUTANT SOURCE-SIP 3 STATE ENF/ADM ORDERS CM82
DESCRIPTION ENTIRE SOURCE CAPACITY SOURCE EMIS CAT 1 LESS THAN 100 TPY RDE7
SCCS CODE

POINT NUMBER 101 MULT POINT CMPL 4 IN COMPL-CERTIFICATN STATE/LOC REGUL REG 1 S 3.11
POLLUTANT PT POINT-SIP 3 STATE ENF/ADM ORDERS CM82
DESCRIPTION BAGHOUSE EQUIPMENT CAPACITY PT EMIS CAT 1 LESS THAN 100 TPY RDE7
SCCS CODE 304001

COMMENT 1 NOTICE OF CONSTRUCTION 9/15/72

ACTION 01 SCHD 9/15/72 ACHV 8/13/73 ACT-TYPE 01 SUBMISSION OF FINAL CONTROL PLAN
STAFF RESULTS 01 ACTION ACHIEVED RDE8 0

ACTION 02 SCHD 11/15/72 ACHV 8/13/73 ACT-TYPE 02 BINDING COMMITMENT TO PURCHASE CONTROL EQUIPMENT
STAFF RESULTS 01 ACTION ACHIEVED RDE8 0

ACTION 03 SCHD 11/30/72 ACHV 8/13/73 ACT-TYPE 03 INITIATION OF ON SITE CONSTRUCTION/PROCESS CHANGE
STAFF RESULTS 01 ACTION ACHIEVED RDE8 0

ACTION 04 SCHD 1/15/73 ACHV 8/13/73 ACT-TYPE 04 COMPLETION OF ON SITE CONSTRUCTION/PROCESS CHANGE
STAFF RESULTS 01 ACTION ACHIEVED RDE8 0

ACTION 05 SCHD 2/15/73 ACHV 8/13/73 ACT-TYPE 05 FINAL COMPLIANCE
STAFF RESULTS 01 ACTION ACHIEVED RDE8 0

ADDITIONAL INFORMATION

This section contains known possible sources of additional information such as emission test reports, file information and emission inventories that were not obtained during this study. The information was not obtained for one or more of the following reasons:

- Data requested but no reply from agency/industry
- Data has to be obtained through a visit to agency/industry
- Local, regional office not contacted.

Source	Contact
Connecticut DEP 165 Capital Avenue Hartford, CT 06115 (203) 566-4030	Mr. Al Conklin
Ohio EPA Cleveland District 2735 Broadway Avenue Cleveland, OH 44115 (216) 694-3500	Mr. Ang
Ohio EPA Akron District 177 South Broadway Akron, OH 44705 (216) 375-2480	Mr. Norm Keckler
Ohio EPA Toledo District 26 Main Street Toledo, OH 43605 (419) 247-6524	Mr. Tom Kavachick
Ohio EPA Mahoning - Trumbull District Room 404 1 Federal Plaza Youngstown, OH 44503 (216) 744-1928	-
Penn. Dept. of Env. Resources York Office (717) 771-4481	Mr. Terry Black
Penn. Dept. of Env. Resources Lancaster Office (717) 299-7601	-
Illinois EPA 2200 Churchill Road Springfield, IL 62706 (217) 782-5544	Ms Barbara Sidler Mr. Miles Zanco Mr. Paul Shmearbok
South Coast Air Quality Management District 9150 Flair Drive El Monte, CA 91731 (213) 572-6258	Mr. Alex Bailey

Source	Contact
U.S. Reduction Co. P.O. Box 30 4610 Kennedy Avenue East Chicago, IN 46312 (312) 731-1000	Mr. Tom Hendon
Apex International Alloys, Inc. Suite 215 2340 Des Plaines Avenue Des Plaines, IL 60018 (317) 297-1360	Mr. Matt Lydon

APPENDIX B

CALCULATIONS

This Appendix contains the calculations for the uncontrolled emission factors and efficiencies noted in Section 6.4 as being derived from test data.

CONTROL EFFICIENCIES

1. <u>Afterburner-Particulate</u>

   a. Liston Brick Co. test data:

      Controlled particulate emissions on reverbatory furnace = 0.0441 g/sec.

      Process weight rate = 221.1 g/sec.

      $$\left(\frac{0.0441}{221.1}\right)(1000) = 0.199 \text{ kg/1000 kg Al}$$

      Assume 2.15 kg/1000 kg Al uncontrolled.

      Thus: $\text{Efficiency} = \frac{2.15 - 0.199}{2.15} = 90.7 \text{ percent}$

   b. U. S. Reduction test data:

      Controlled particulate emissions on reverbatory furnace = 0.0617 g/sec.

      Process weight rate = 378 g/sec

      $$\left(\frac{0.0617}{378}\right)(1000) = 0.163 \text{ kg/1000 kg Al}$$

      Assume 2.15 kg/1000 kg Al uncontrolled.

      Thus: $\text{Efficiency} = \frac{2.15 - 0.163}{2.15} = 92.4 \text{ percent}$

   c. U. S. Reduction test data:

      Controlled particulate emissions on chip dryer = 0.0816 g/sec.

      Process weight rate = 88.2 g/sec.

      $$\frac{0.0816}{88.2}(1000) = 0.925 \text{ kg/1000 kg Al}$$

      They assume uncontrolled rate = 7 kg/1000 kg Al

      Thus: $\text{Efficiency} = \frac{7 - 0.925}{7} = 86.8 \text{ percent}$

Therefore, average afterburner efficiency =

$$\frac{90.7 + 92.4 + 86.8}{3} = 90.0 \text{ percent}$$

2. Scrubber with Bell System - Particulate

Vulcan test data:

Particulate released during demagging = 237 kg

Particulate caught by bell system = 233 kg

$$\text{Efficiency} = \frac{233}{237} = 98.3 \text{ percent}$$

3. Scrubber with Bell System - Cl_2

Vulcan test data:

Cl_2 released during demagging = 36.3 kg

Cl_2 caught be scrubber = 36.2 kg

$$\text{Efficiency} = \frac{36.2}{36.3} = 99.7 \text{ percent}$$

4. Coated Baghouse - Particulate

a. Allied Metals test data and AP-42:

Particulates released during charging = 0.0353 kg/1000 kg Al

Uncontrolled rate = 2.15 kg/1000 kg Al

$$\text{Efficiency} = \frac{2.15 - 0.0353}{2.15} = 98.4 \text{ percent}$$

b. Allied Metals test data:

Particulates released during charging and demagging = 0.0558 g/sec.

Uncontrolled test data = 3.518 g/sec.

$$\text{Efficiency} = \frac{3.518 - 0.0558}{3.518} = 98.4 \text{ percent}$$

5. <u>Coated Baghouse - Gaseous Fluorides</u>

a. Allied Metals test data - g/sec

Fluorides released during demagging = 0.0135 g/sec

Uncontrolled test data = 4.498 g/sec

$$\text{Efficiency} = \frac{4.498 - 0.0135}{4.498} = 99.7 \text{ percent}$$

b. Allied Metals test data - ppm

Fluorides released during demagging = 0.48 ppm

Uncontrolled test data = 373.3 ppm

$$\text{Efficiency} = \frac{373.3 - 0.48}{373.3} = 99.9 \text{ percent}$$

Average = 99.8 percent

UNCONTROLLED EMISSION FACTORS

1. <u>Particulate Emissions From Chip Dryers</u>

   a. From test at U. S. Reduction in California:

      Controlled (afterburner) emission rate = 0.0816 g/sec

      Process weight rate = 88.2 g/sec

      $$\left(\frac{0.0816}{88.2}\right)(1000) = 0.925 \text{ kg part./1000 kg Al}$$

      They assumed 87 percent efficiency on afterburner.

      Thus: $EF = \frac{0.925}{1-.87} = 7.1$ kg/1000 kg Al

   b. From test at Vulcan Materials in California:

      Controlled (afterburner) emission rate = 0.3856 g/sec

      Process weight rate = 279.0 g/sec

      $$\left(\frac{0.3856}{279.0}\right)(1000) = 1.382 \text{ kg part./1000 kg Al}$$

      Assuming 90 percent efficiency on afterburner yields:

      $$EF = \frac{1.382}{1-.9} = 13.8 \text{ kg/1000 kg Al}$$

   The range is therefore 7-14 kg/1000 kg Al.

2. <u>Particulate Emissions From Reverbatory Furnace (Charging)</u>

   a. AP-42 states 2.15 kg/1000 kg Al

   b. Allied Metal test data:

      Since efficiencies were calculated to be 98.4 percent using test data or AP-42, assume 2.15 kg/1000 kg Al is accurate.

3. <u>Hydrocarbon and Carbon Monoxide Emissions From Reverbatory Furnace (Charging)</u>

Allied Metal test data:

HC: controlled emission rate = 0.0545 kg/1000 kg Al

CO: controlled emission rate = 38.3 ppm

Assume 95 percent efficiency, then:

$$\text{Uncontrolled HC rate} = \frac{0.0545}{1-.95} = 1.1 \text{ kg/1000 kg Al}$$

$$\text{Uncontrolled CO rate} = \frac{38.3}{1-.95} = 760 \text{ ppm}$$

4. <u>Particulate Emissions From Reverbatory Furnace (Demagging)</u>

Fluoride demagging:

Allied Metal test data:

Controlled emission rate = 0.195 kg/1000 kg AlF_3

Control efficiency = 98.4 percent

$$EF = \frac{0.195}{1-.984} = 12.2 \text{ kg/1000 } AlF_3$$

Chlorine demagging:

AP-42 states 500 kg/1000 kg Cl_2

5. <u>Carbon Monoxide Emissions From Reverbatory Furnace (Demagging)</u>

Allied Metal test data:

Controlled emission rate = 28 ppm

Assume 95 percent efficiency, then:

$$\text{Uncontrolled CO rate} = \frac{28}{1-.95} = 560 \text{ ppm}$$

6. <u>Fluoride Emissions From Reverbatory Furnaces (Demagging)</u>

Allied Metal test data:

Controlled emission rate for particulate fluorides = 0.062 kg/1000 kg AlF_3

Controlled emission rate for gaseous fluorides = 0.058 kg/1000 kg AlF_3

For 99.8 percent efficiency for gaseous fluorides:

Uncontrolled gaseous fluorides emissions rate =

$$\frac{0.058}{1-.998} = 29 \text{ kg/1000 kg } AlF_3$$

For 98.4 percent efficiency for particulate fluorides:

Uncontrolled particulate fluorides emission rate =

$$\frac{0.062}{1-.984} = 4 \text{ kg/1000 kg } AlF_3$$

7. <u>Chlorine Emissions From Reverbatory Furnace (Demagging)</u>

a. Vulcan test data - California:

Uncontrolled emissions = 36.29 kg

Process input = 460.4 kg

$$EF = \left(\frac{36.29}{460.4}\right)(1000) = 80 \text{ kg/1000 kg } Cl_2$$

b. Vulcan test data - Ohio:

Uncontrolled emissions = 237 kg

Process input = 1089 kg

$$EF = \left(\frac{237}{1089}\right)(1000) = 218 \text{ kg}$$

APPENDIX C

LIST OF CONTACTS AND INDIVIDUALS WITH EXPERTISE IN THE INDUSTRY

FEDERAL AGENCY CONTACTS

Mr. William O. Herring
Office of Air Quality Planning and Standards
Industrial Studies Branch
Emission Standards and Engineering Division
U. S. EPA
Research Triangle Park, NC 27711
(919) 541-5295

Mr. Robert Ogg
Region II EPA
26 Federal Plaza
New York, NY 10007
(212) 264-2517

Mr. Benson Hellwig
Region IV EPA
345 Courtland NE
Atlanta, GA 30308
(404) 881-4298

Mr. Kesari
Region V EPA
230 S. Dearborn Street
Chicago, IL
(312) 353-2086

Mr. Steve Rothblatt
Region V EPA
230 S. Dearborn Street
Chicago, IL
(312) 353-2086

Mr. Arnold Den
Region IX EPA
Surveillance and Analysis Division
215 Fremont Street
San Francisco, CA 94105
(415) 556-8752

Mr. Bill Thurston
Region IX EPA
215 Fremont Street
San Francisco, CA 94105
(415) 556-6150

Ms. Linda Wunder-Freet
Air Investigator
Region IX EPA
215 Fremont Street
San Francisco, CA 94105
(415) 556-8047

Federal Agency Contacts (Continued)

Mr. John Burckle
Industrial Environmental Research Laboratory
Cincinnati, OH
(513) 684-4491

STATE AGENCY CONTACTS

Mr. Al Conklin
Enforcement Division
Connecticut Department of Environmental Protection
Hartford, CT
(203) 566-4030

Ms. Barbara Sidler
Senior Technical Advisor
Enforcement Programs
Illinois EPA
2200 Churchill Road
Springfield, IL 62706
(217) 782-5544

Mr. Ed Stresino
Chief, Enforcement Branch
Indiana State Board of Health
1330 W. Michigan Street
Indianapolis, IN 46206
(317) 633-0665

Mr. Andrew Sunderland
Indiana State Board of Health
Air Pollution Control Division
1330 W. Michigan Street
Indianapolis, IN 46206
(317) 633-0665

Mr. Ang
Ohio EPA
Cleveland District
Cleveland, OH
(216) 664-3500

State Agency Contacts (Continued

Mr. Alan Franks
Ohio EPA
Public Information Center
Columbus, OH
(614) 466-8508

Mr. Howard Johnson
Ohio EPA
Public Information Center
Columbus, OH
(614) 466-7390

Mr. Bill Juris
Ohio EPA
Columbus, OH
(614) 466-7390

Mr. James Benson
Chief, Case Section
Division of Abatement and Compliance
Bureau of Air Quality Control
Pennsylvania Department of Environmental Resources
P. O. Box 2063
Harrisburg, PA 17120
(717) 787-4324

Mr. Alex Bailey
South Coast Air Quality Management District
9150 Flare Drive
El Monte, CA 91731

INDUSTRIAL CONTACTS

Mr. George Herman
Manager of Can Reclamation
ALCOA
Pittsburgh, PA
(412) 553-4645

Mr. Jim Smith
ALCOA
Pittsburgh, PA
(412) 553-2504

Mr. Marvin Fink
Vice President
Allied Metal Company
2059 S. Canal Street
Chicago, IL
(312) 225-2800

Mr. Matt Lydon
Apex International Alloys, Inc.
Suite 215
2340 Des Plaines Avenue
Des Plaines, IL 60018
(312) 297-1360

Mr. Skip Brown
Engineering Department
Ogden Metals
20521 Chargrin Street
Cleveland, OH
(216) 752-4000

Mr. Jack Eagan
Manager of Environmental Control
Metals Division
Vulcan Materials Company
P. O. Box 720
1 Huron Street
Sandusky, OH 44870
(419) 626-4610

Mr. Tom Hendon
U. S. Reduction Company
P. O. Box 30
4610 Kennedy Avenue
E. Chicago, IN 46312
(312) 731-1000

ASSOCIATION CONTACTS

Mr. R. Cooperman
Executive Director
Aluminum Recycling Association
Suite 504
900 17th Street, NW
Washington, D. C. 20006
(202) 785-0550

Mr. Sy Epstein
The Aluminum Association
818 Connecticut Avenue, NW
Washington, D. C. 20006
(202) 862-5100

Mr. Howard Ness
National Association of Recycling Industries, Inc.
330 Madison Avenue
New York, NY 10017
(212) 867-7330

CONSULTANTS

Mr. William D. Balgord
President
Environmental Resources Technology, Inc.
P. O. Box 300
Brookfield, CT 06804
(203) 775-1523

Dr. Teller
Teller Environmental Systems, Inc.
10 Faraday Street
Worcester, MA.
(617) 755-8613

APPENDIX D

TELEPHONE CALLS

This appendix contains copies of all pertinent telephone conversations (calls such as those placed to a receptionist or secretary with the contact being out of the office are not recorded).

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: May 12, 1978

PERSON CALLED: William Herring

ORGANIZATION: EPA

ADDRESS: Raleigh-Durham, N.C.

TEL. NO. (919) 541-5295

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called Bill to inform him that the Work Plan was in the mail and that once he has received it and read it over he should contact me. At that time we'll decide whether to revise it, or whether I should come down to discuss it.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: May 17, 1978

PERSON CALLED: Bill Balgord

ORGANIZATION: Consultant - ER & T

ADDRESS: Brookfield, CT.

TEL. NO. (203) 775-1523

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called Bill to see if he could assist us with the secondary aluminum project. He said he would come to TRC on May 19 to discuss it.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: May 18, 1978

PERSON CALLED: William Herring

ORGANIZATION: EPA

ADDRESS: Raleigh-Durham, N.C.

TEL. NO. (919) 541-5295

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Bill called me in order to comment on the Work Plan which I sent to him last week. He approved of the Plan, but had a few comments as follows:

1. He stressed that one of the important results of this project will be the compiling of a list of the best controlled plants. These will be the plants that EPA might choose for testing later on. He said other parts of the project could be weaker in order to obtain this information.
2. The contacts with agencies and associations should result in information on these best controlled plants - such as processes, raw materials, products, available data, etc.
3. He felt that the EPA Region V office might be a good place to start for information since there are many plants in that region. Likewise, Region II could be helpful.
4. He questioned the visit to a "typical" plant - he thought that meant that I would bypass one with best control technology as being atypical. I assured him that what I meant was that I would visit a local plant to get firsthand knowledge of operations and that, if given a choice, I would obviously go to one with a good control system. I told him Bill Balgord might steer me in the right direction here.
5. He felt the pages should be numbered in the Plan.
6. He will send out formal approval with a list of comments.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 1, 1978

PERSON CALLED: Al Conklin

ORGANIZATION: Conn. DEP

ADDRESS: Hartford, CT.

Enforcement Div.

TEL. NO. (203) 566-4030

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called DEP to see what information they might have regarding secondary aluminum smelters. Mr. Conklin said he would prefer that I talk to individual companies first. They have permits there, but he would like a written request before releasing them for our information (even though they are public domain).

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 1, 1978

PERSON CALLED: _____

ORGANIZATION: EPA - Region I

ADDRESS: Boston, Mass.

Air Compliance

TEL. NO. (617) 223-5610

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called to see if they had any information on secondary aluminum smelters. They said all they would have would be what is included in CDS.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Ms. Barbara Sidler

ORGANIZATION: Illinois EPA

ADDRESS: 2200 Churchill Rd.

Springfield, Ill. 62706

TEL. NO. (217) 782-7327

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called to see what information they might have. She requested a written request be sent to them.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Bob Duprey

ORGANIZATION: EPA - Region V

ADDRESS: Air Branch

230 S. Dearborn St., Chicago, Ill.

TEL. NO. (312) 353-2212

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

He was not in. Someone will call back.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: _____

ORGANIZATION: Air Resources Board

ADDRESS: P.O. Box 2815

Sacramento, Calif. 95812

TEL. NO. (916) 322-2892

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called regarding secondary aluminum plants in California. The knowledgeable person in that area was not in. Someone will call back.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Howard Ness

ORGANIZATION: National Association of Recycling Industries, Inc.

ADDRESS: 330 Madison Ave.

New York, N.Y. 10017

TEL. NO. (212) 867-7330

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called Mr. Ness to see what kind of information was available through NARI regarding secondary aluminum manufacturing. He has no statistical information at all. A membership list is available to members only.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Mr. Ang

ORGANIZATION: Ohio EPA - Cleveland District

ADDRESS: Cleveland, Ohio

TEL. NO. (216) 664-3500

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Mr. Ang had very little information on secondary plants in the Cleveland area. He said the person who should know more is in India for a month. He told me to call Alan Franks at the Public Information Center (614-466-8508). Permit information is in Cleveland (2735 Broadway Ave.).

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Alan Franks

ORGANIZATION: Ohio EPA

ADDRESS: Public Information Center

Columbus, Ohio

TEL. NO. (614) 466-8508

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Mr. Franks said that the person who might know more would be Howard Johnson of the Air Office (614-466-7390). He wasn't available and I should call on June 8.

He also said to try the regional offices:

Akron - Norm Keckler (216) 375-2480
Trumbull - (216) 744-1928
Sandusky - (419) 352-8461
Toledo - Tom Kavachick (419) 247-6524
Uhrichville (SE office) - (614) 385-8501

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Robert Ogg

ORGANIZATION: Region II EPA

ADDRESS: Federal Office Building

26 Federal Plaza, N.Y., N.Y. 10007

TEL. NO. (212) 264-2517

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

He said to send a letter of questions and address it to Frank Giaccone - Chief, Air Facilities Branch.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 7, 1978

PERSON CALLED: Jim Benson

ORGANIZATION: Penn. Dept. of Env. Resources

ADDRESS: Harrisburg, PA.

TEL. NO. (717) 787-4324

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

An emission inventory is not available yet but he has information on Gettysburg Foundries which he will send up. He said to call the regional offices for other plants:

York office: Terry Black (717) 771-4481
Lancaster office: (717) 299-7601

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 8, 1978

PERSON CALLED: Sy Epstein

ORGANIZATION: Alum. Assoc.

ADDRESS: 818 Conn. Ave. N.W.

Washington, D.C. 20006

TEL. NO. (202) 862-5100

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I talked to Sy about any information he might have. He said they have limited information - they primarily represent the primary industry. He said to try the ARA.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Andrew Sunderland

ORGANIZATION: Indiana State Board of Health

ADDRESS: Indianapolis, Ind.

TEL. NO. (317) 633-0665

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

According to Andy, the best controlled plants in the state are:

1. Wabash Smelting
2. U.S. Reduction in E. Chicago.

The others are not so good. He said to send a questionnaire to:

State Board of Health
Air Poll. Control Div.
1330 W. Michigan St.
Indianapolis, Ind. 46206.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 8, 1978

PERSON CALLED: Metallurgical Division

ORGANIZATION: South Coast Air Quality Management District

ADDRESS: El Monte, Cal.

TEL. NO. (213) 572-6220

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I was informed that they have source test data and will send it out through a questionnaire we will send them.

The Chief Engineer in that district is Bob McKnight (213-572-6205).

I should address the questionnaire to Alex Bailey.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Howard Johnson

ORGANIZATION: Ohio EPA

ADDRESS: Columbus, Ohio

TEL. NO. (614) 466-7390

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Howard said to check with the local air agencies or district offices. No one at the state office is familiar enough with the plants to rate them according to best control. I can get Emission Inventory information by contacting Bill Juris.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Benson Hellwig

ORGANIZATION: Region IV EPA

ADDRESS:

TEL. NO. (404) 881-4298

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

He does not have information on compliance. I should probably contact the states. He'll call them and tell them to expect a call/ questionnaire.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Bill Thurston

ORGANIZATION: Region IX EPA

ADDRESS: San Francisco, Cal.

TEL. NO. (415) 556-6150

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

He said that South West Alloys in Arizona is very poorly controlled. He said that Los Angeles controls are stringent. He suggested I talk to the Surveillance & Analysis Group - Mr. Arnold Den (415-556-8752).

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Arnold Den

ORGANIZATION: Region IX - EPA

ADDRESS: San Francisco, Cal.

Surveillance & Analysis

TEL. NO. (415) 556-8752

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Mr. Den has some inspection files. He feels the Alcoa plants are well controlled (but not really secondary aluminum smelters). U.S. Reduction is good. Have to clean up chlorine in Los Angeles as well as other pollutants. Metal Products in Riverside is well controlled. They have controlled and uncontrolled test data available but we'll have to send someone out since no personnel are available.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Engineering Department

ORGANIZATION: Ogden Metals

ADDRESS: 20521 Chargrin St.

Cleveland, Ohio

TEL. NO. (216) 752-4000

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called to see if the Wabash, Ind. plant is their cleanest (this supposedly is a good one, according to the Ind. State Board of Health). I was told to contact Skip Brown on Wednesday.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Julius Gordon

ORGANIZATION: U.S. Reduction

ADDRESS: E. Chicago, Ind.

4610 Melville Ave.

TEL. NO. (312) 731-1000

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Mr. Gordon said their two cleanest plants are the Toledo, Ohio and Ontario, Cal. plants. I should call on Monday and talk to Tom Hendon (X-350) about plant visits or more information.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Julius Gordon

ORGANIZATION: U.S. Reduction

ADDRESS: E. Chicago, Ind.

4610 Melville Ave.

TEL. NO. (312) 731-1000

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Mr. Gordon said their two cleanest plants are the Toledo, Ohio and Ontario, Cal. plants. I should call on Monday and talk to Tom Hendon (X-350) about plant visits or more information.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 9, 1978

PERSON CALLED: Jim Smith

ORGANIZATION: ALCOA

ADDRESS:

Pittsburgh, PA.

TEL. NO. (412) 553-2504

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

We talked about their plants in the Los Angeles area (and Vernon and Corona). They are not strictly secondary aluminum smelters. They melt down extrusions and castings. Further information on this from Mr. George Herman (Manager of Can Reclamation), (412) 553-4645. He might know of some secondary plants in the area.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: Jack Eagan

ORGANIZATION: Vulcan Materials Co. - Manager of Env. Control

ADDRESS:

Sandusky, Ohio

TEL. NO. (419) 626-4610

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Jack said they have four plants:

Sandusky, Ohio
Corona, Cal.
Oak Creek, Wis.
Hot Springs, Ark.

Corona has afterburners and incineration equipment. He feels that is better in order to control carcinogenics. They use some scrubbers -- no baghouses.

I'll have to write and give authority before setting up the plant visits.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: Matt Lydon

ORGANIZATION: Apex International Alloys, Inc.

ADDRESS:

Des Plains, Ill.

TEL. NO. (317) 297-1360

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I asked him about a plant visit. He said he would have to wait for the EPA official request. He said all four plants are well controlled:

Cleveland, Ohio
Chicago, Ill.
Checotah, Okla.
Bicknell, Ind.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: Bill Juris

ORGANIZATION: Ohio EPA

ADDRESS:

TEL. NO. (614) 466-7390

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

He will send an Emission Inventory if they have any information on secondary plants included in it.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: Tom Hendon

ORGANIZATION: U.S. Reduction - Head of Env. Dept.

ADDRESS:

E. Chicago, Ind.

TEL. NO. (312) 731-1000

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I talked to him about plant visits. He said he would not consider it at this time due to legal actions currently going on at their Toledo, Ohio plant (the one he feels is best controlled). In fact, he wouldn't consider other plants at this time either. Very touchy situation with the local people, themselves, and EPA.

He said the plant in Indiana is not as well controlled due to easier regulations and enforcement. They comply with the regulations and no further.

He said Rochester, N.Y. has a good plant, as do Cleveland (Apex) and Sandusky (Vulcan).

I should send him a list of questions.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: Steve Rothblatt/Mr. Kesari

ORGANIZATION: Region V EPA

ADDRESS:

Chicago, Ill.

TEL. NO. (312) 353-2086

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Steve said that Mr. Kesari (Engineering) would have information on secondary aluminum smelters. I talked to him and he said that three well controlled plants are:

Allied Metal Co.
Apex International
Harco Aluminum

all of which are in Chicago.

Permit information is at the state office in Springfield.

I could talk to Miles Zanco (Manager of Field Operations) or Paul Shmearbok (Manager of Permit Section) at the state office if I need more information.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: Bill Balgord

ORGANIZATION: Consultant - ER & T

ADDRESS: Brookfield, CT.

TEL. NO. (203) 775-1523

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Bill will check further into plants with best technology. He will send up a copy of Chapter 3 of the BNF Metals Technology Centre Report as requested.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 12, 1978

PERSON CALLED: George Herman

ORGANIZATION: ALCOA - Manager of Can Reclamation

ADDRESS:

Pittsburgh, PA.

TEL. NO. (412) 553-4645

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

He stated that the ALCOA plants are not secondary smelters under our definition. He suggested Vulcan Materials (Corona, Cal.) and Apex International (Long Beach, Cal.).

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 13, 1978

PERSON CALLED: Bill Herring

ORGANIZATION: EPA

ADDRESS: Raleigh-Durham, N.C.

TEL. NO. (919) 541-5295

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

Bill said to go ahead and make trip arrangements with Vulcan (either plant) and Allied Metals in Chicago. The letters are on their way.

He will probably go along on one visit and George Crane on another.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 13, 1978

PERSON CALLED: Jack Eagan

ORGANIZATION: Vulcan Materials Co.

ADDRESS: 1 Huron St. P.O. Box 720

Sandusky, OH

TEL. NO. (419) 626-4610

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

They use scrubbers on their demagging process in both the Corona and Sandusky plants. Afterburners are used on the furnaces and driers. Both plants use chlorine for demagging.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 13, 1978

PERSON CALLED: Mr. Martin

ORGANIZATION: Allied Metal

ADDRESS: 2059 S. Canal St.

Chicago, IL

TEL. NO. (312) 225-2800

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

They will see about a plant visit after they receive a letter of authorization. The letter should be addressed to Marvin Fink, V.P.

They have a chromatographic coated baghouse on their Chicago plant. They use fluorine for demagging. They also have test results available.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 13, 1978

PERSON CALLED: Barbara Sudler

ORGANIZATION: Div. of Air Pollution Control

ADDRESS: IL EPA

Springfield, IL

TEL. NO.

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

She called to say she received the questionnaire and they have no record of two plants:

Tower Metals
Apex International

Also, they have information on Reynolds Metal which was not on the list. They will check with the firms about confidentiality and then fill out the information.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 15, 1978

PERSON CALLED: John Burckle

ORGANIZATION: IERL

ADDRESS: Cincinnati, OH

TEL. NO. (513) 684-4491

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I called to see if he could send me a copy of the Draft version of the Source Assessment Study. He said it has to go through EPA.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 19, 1978

PERSON CALLED:	Andy Sunderland
ORGANIZATION:	Ind. State Board of Health
ADDRESS:	1330 W. Michigan St.
	Indianapolis, Ind.
TEL. NO.	(317) 633-0663
TRC PERSONNEL:	E. T. Brookman

SUBJECT MATTER:

I will go out there on Thursday, June 29 and obtain Emission Inventory and file information. I should see Ed Stresino. They open at 8:15.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 19, 1978

PERSON CALLED: Eng. Dept.

ORGANIZATION: Apex International

ADDRESS:

Des Plaines, IL

TEL. NO. (312) 297-1360

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

They have a chromatographic coated baghouse (Wheelabrator-Frye - same as Teller) and afterburners. They use fluorine for demagging.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 19, 1978

PERSON CALLED: Bill Herring

ORGANIZATION: EPA

ADDRESS: Raleigh-Durham, NC

TEL. NO. (919) 541-5295

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I informed him of the plant visit schedule. He said he will be joining me. He agreed to the two visits and the visits to the Ind. State Board of Health and Region IX headquarters in San Francisco on June 21.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 19, 1978

PERSON CALLED: Marvin Fink

ORGANIZATION: Allied Metal Co.

ADDRESS:

Chicago, IL

TEL. NO. (312) 225-2800

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

We set up a tentative plant visit for Wednesday, June 28 at the Chicago plant between 9:00 - 10:00 a.m.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 19, 1978

PERSON CALLED: Jack Eagan

ORGANIZATION: Vulcan Materials

ADDRESS:

Sandusky, OH

TEL. NO. (419) 626-4610

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

We set up a tentative plant visit for Tuesday, June 27 at the Sandusky plant between 9:00 - 10:00 a.m.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 26, 1978

PERSON CALLED: Jack Eagan

ORGANIZATION: Vulcan Materials

ADDRESS: Sandusky, OH

TEL. NO. (419) 626-4610

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I confirmed the plant visit on Tuesday, June 27 at 9:00 a.m.

Directions to motel (Green Tree Inn, 1935 E. Cleveland Rd):

Rt. 80 to Rt. 250
All the way into Sandusky
Follow signs to Cedar Pt.
Just before entrance to Rt. 6 (Cleveland Rd.) is the motel.

Directions to plant:

Take Rt. 6 across town - about 1 mile, veer off at intersection of Monroe St.
Goes by plant - there will be no signs
South side of St. is Chrysler Plastics and G&C Foundry
They're on the north side - on the lake
Go up Superior St. (1 block) to the office
See receptionist and ask for Jack Eagan.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: June 26, 1978

PERSON CALLED: Marvin Fink

ORGANIZATION: Allied Metals

ADDRESS: S. Canal St.

Chicago

TEL. NO. (312) 225-2800

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I confirmed the plant visit on Wednesday, June 28 at 9:00 a.m.

Directions:

Take expressway - get off at 18th St.
Go east to Canal St.
Go down Canal to 20th St.
See receptionist - ask for Marvin Fink.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: July 5, 1978

PERSON CALLED: Bill Herring

ORGANIZATION: EPA

ADDRESS: Raleigh-Durham, NC

TEL. NO. (919) 541-5295

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

Bill called concerning a few items.

1. He is sending me a copy of the trip report for Vulcan.

2. I should be preparing a Docket (copy of all documents - anything not readily available).

3. He wanted to know the man-hours for June (370).

4. He contacted Fred Craig of IERL in Cinn. He will send me a copy of the Rochester Smelting Report.

5. The final report should be in SI units with English in parenthesis.

6. He feels another trip probably isn't warranted.

7. He said there is considerable fumes from fluoridation and chlorination.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: July 5, 1978

PERSON CALLED: Dr. Teller

ORGANIZATION: Teller Env. Systems, Inc.

ADDRESS: 10 Faraday

Worcester, MA

TEL. NO. (617) 755-8613

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I called Dr. Teller to see if he had any further information on his baghouse. He is sending out an EPA report on it.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: July 11, 1978

PERSON CALLED: Dr. Teller

ORGANIZATION: Teller Env. Systems, Inc.

ADDRESS: Worcester, MA

TEL. NO. (617) 755-8613

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I called Dr. Teller to see if he had any information on the Derham and ALCOA Processes. He said the Derham process was developed in England and only one or two U.S. firms tried it. It is only used for Cl_2 control - not for charging - would still need control for charging emissions. It's a third well system (charging-combustion-demagging). To his knowledge it is not used in U.S. today. The ALCOA process is of the same order - only for demagging and not for charging emissions. He thinks it may be used by a few plants in the U.S.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: July 11, 1978

PERSON CALLED: Dick Cooperman

ORGANIZATION: Alum. Recycling Assoc.

ADDRESS: Washington, DC

TEL. NO. (202) 785-0550

TRC PERSONNEL: E. T. Brookman

SUBJECT MATTER:

I called to see if he could be of any help to this study. He said the list of plants we have (Dept. of Commerce) is the same as theirs. He said their annual capacities are as follows (based on 3 shifts/day, 5 days/week):

1973 - 1.8 billion lbs
1977 - 2.6 billion lbs
1978 - 2.5 billion lbs

by 1980 - 2.3 billion lbs
by 1983 - 2.6 billion lbs

Production in 1978 was 2.1 billion lbs or roughly 84% of capacity.

He anticipates plant shut downs through this year and next due to bad economics.

He feels Jack Eagan of Vulcan is one of the most knowledgeable people in the industry.

He is willing to cooperate with any thing we might ask. He requested a letter from us giving the EPA contract no., etc.

REPORT OF TELEPHONE CONVERSATION

SECONDARY ALUMINUM MANUFACTURING

DATE: July 12, 1978

PERSON CALLED: Bill Herring

ORGANIZATION: EPA

ADDRESS: Raleigh-Durham, N.C.

TEL. NO. (919) 541-5295

TRC PERSONNEL: E.T. Brookman

SUBJECT MATTER:

I called Bill to inform him of the project costs for the month of June ($10,684.82) and the total cost ($15,513.49). I told him I received the reports he sent up. I also told him the project report is proceeding with no problem.

He questioned the use of the name of the coating material Allied uses on the baghouse in the report. He's not sure if Teller considers it proprietary. I told him I would doubt it since Allied picked it up commercially. He is sending me a copy of the information sheet on Teller's coating along with the Rochester smelter report.

APPENDIX E

ADDITIONAL REFERENCES NOT CITED IN TEXT

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